AN ANALYSIS OF FINANCIAL FACTORS AFFECTING THE PERFORMANCE OF SELECTED SMEs WITH SPECIAL REFERENCE TO MAHARASHTRA STATE.

A THESIS SUBMITTED TO

THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

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ACCOUNTING & FINANCIAL MANAGEMENT

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DECLARATION

I declare that the thesis entitled *"An analysis of financial factors affecting the performance of selected SMEs with special reference to Maharashtra state"*submitted by me for the degree of Doctor of Philosophy in Accounting and Financial Management is the record of work carried out by me under the guidance of Prof.(Dr.) Shirish R.Kulkarni and has not been submitted earlier for any award of any degree, diploma, associate-ship, fellowship, titles in this or any other University or other similar institution of Higher learning.

Place :-Vadodara   Bath Hardeep Kaur Amarjeet Singh

Date:- 23/08/2018

CERTIFICATE

This is to certify that the work incorporated in the thesis titled *"An analysis of financial factors affecting the performance of selected SMEs with special reference to Maharashtra state"* submitted by *Bath Hardeep Kaur AmarjeetSingh* comprises the result of independent and original study carried out by the candidate under my supervision. The material that has been collected and used from different sources has been duly acknowledged in the thesis.

Place :-Vadodara
Date:- 23/08/2018

Prof.(Dr.) Shirish R. Kulkarni
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ABBREVIATIONS

ANOVA   -   Analysis of variance

BSE SME   -   Bombay Stock Exchange

BT parks   -   Bio Technology Parks

CATAR   -   Current Asset To Total asset Ratio

CMIE   -   Centre for Monetary Indian Economy

CI   -   Comprehensive Index

CIDCO   -   The City and Industrial Development Corporation of Maharashtra

CIN   -   Corporate Identity Number

Df   -   Degree Of Freedom

DIC   -   District Industry Centers

EM   -   Entrepreneurs Memorandum

EPS   -   Earning Per Share

EBIT   -   Earnings Before Interest and Taxes

FY   -   Financial Year

GDP   -   Gross Domestic Product

GSDP   -   Gross State Domestic Product

GoI   -   Government of India

GOM   -   Government Of Maharashtra

Ho   -   Null Hypothesis

IPO   -   Initial Public offering

INR   -   Indian Rupees

IT	-	Information Technology
ISO	-	The International Organization for Standardization
KVIC	-	Khadi and Village Industries Commission
MFBs	-	Micro Finance banks
MFI	-	Microfinance Institutions
MSME	-	Micro, Small and Medium Enterprise
MIDC	-	Maharashtra Industrial Development Corporation
PVT LTD	-	Private Limited
PSI	-	Package Scheme of Incentives
ROCE	-	Return On Capital Employed
ROC	-	Registrar of Companies
NGO	-	Non government organisation
NSIC	-	National Small Industries Corporation
NSS	-	National Sample Survey
OTCEI	-	Over The Counter Exchange Of India
OECD	-	Organisation of Economic Co-operation and Development
USD	-	United States dollar
UI	-	Utilisation Index
SME	-	Small and Medium Enterprise
SIDO	-	Small Industries Development Organization
SSI	-	Small Scale Industries
SIDBI	-	Small Industry Development Bank of India

CHAPTER – 1

INTRODUCTION

"Small Businesses are the Backbone of our Economy and the Cornerstones of Our Communities"

-Mahatma Gandhi

1.1   INTRODUCTION

"India is the fourth largest economy in the world (in terms of Purchasing Power Parity mode, and the second largest in developing Asia) which accounts for 22% of GDP, 33.8% population and 32.5% of the potential workforce in developing Asia."[1] The prevalence of development is visible from the augmented investment in infrastructure, copious job opportunities, surfacing private sector with small and big companies/ corporate houses and high rise in consumerism. This has also reflected in the small scale sector. The MSME sector substantiates growth of Indian economy and small sector -friendly policy framework by the Indian government and adequate infrastructural support can make SMEs prominent contributor for the growing Indian economy.[2]

"Last five decades is evident of effervescent and strong growth of Micro, Small and Medium Enterprises (MSME) sector is as high as our developing growth of India. Generating large opportunities in employment is handled by SME sector in India. Considering its low cost investment, it is a great boon for the Indian economy.

This provides a accelerated push to rural area for industrialization, which will further eliminate regional imbalances, maximum equitable distribution of national income and wealth. Socio economic development of the country has been enormously aided by MSME as it plays an imperative role of being subsidiary to the bigger industries."

1.1.1   Background of MSME

Micro, small and Medium Enterprises are broadly classified into two categories;

i. Manufacturing.

ii. Those engaged in rendering services.

Small and medium enterprises have unique definitions globally. The number of employees is also a base to segregate the establishments in Micro, small, medium in some countries.

In some other countries, Small and Medium enterprise is definition is depending upon the annual turnover of the company .The concept of size is also a relative fact with reference to the local economies, further it depends on the economy of countries as large company can be small in large economy and small economy can be large in small economy.

1.1.2 The Small Scale Industries (SSI) Sector in India

According to Dr B Yerram Raju, Dean of Studies & Senior Faculty Member at Administrative Staff College of India at Hyderabad states "the encouraging and promoting policies of the small-scale sector are always on foot front in India since independence, the priorities of each five year plan have changed as per dynamic environment."

"The Six Industrial Policy Resolutions which have been framed since 1948 have set out the guidelines for the country's industrial development with different degrees of emphasis on the main objectives." Post independence, industrialization strategy was based on 'The Industries Development and Regulation Act of 1951."[3]

"As per planning commission the model for industrialization in the 1950s was based on capital-intensive heavy industries. Throng consumption-good producing, labour oriented, evenly dispersed small and medium enterprises are the paramount foundation for employment creation."[4] As the process of dynamic economic environment led to varying priorities, the policy focus shifted to regional inequality (1977), promoting ancillary (1980), major concentration in rural areas and promotion of exports (1990) and then to Small, Tiny and Village Industries (1991). During all these years the definition of SSIs in India was kept changing based on the changing ecosystem and the progress of the economy as compiled in the Table1.1 below.

Table – 1.1 : Official definition of SSIs in India from 1950 to 2001.

YEAR	Investment Limits

1950	Upto Rs.5Lakh in Fixed assets
1960	Upto Rs.5Lakh in Fixed assets
1966	Upto Rs.7.5 Lakh in Plant and Machinery
1975	Upto Rs.10 Lakh in Plant and Machinery
1980	Upto Rs.20 Lakh in Plant and Machinery
1985	Upto Rs.35 Lakh in Plant and Machinery
1991	Upto Rs.60 Lakh in Plant and Machinery
1997	Upto Rs.300 Lakh in Plant and Machinery
1998	Upto Rs.1 crore in Plant and Machinery
1999	Upto Rs.100 Lakh in Plant and Machinery
2001	Upto Rs.100 Lakh in Plant and Machinery

Source: *Compiled from the statistics released by Small Scale Industries in India, Office the Development Commissioner, Ministry of SSI, Govt. of India 2002.*

1.1.3 Government policies and support measures for MSMEs

Brief History

The evolution of the policy framework and support measures of the government can be broadly grouped into following three periods:

1. 1948-1991 —

The policy resolutions from 1948 to 1991 were focused on the credit provided to the small and medium enterprises. These policy measures aimed at mobilizing the capital and skill of private sector and thereby reducing inequality in distribution of national income.

 "The Small Industries Development Organization (SIDO) was setup in 1954 as an apex body for sustained and organized growth of small enterprises. This is now known as the Micro Small and Medium Enterprises Development Organization."[5]

In 1956, the National Small Industries Corporation (NSIC), The Khadi and Village Industries Commission (KVIC) and the Coir Board were also setup. The era provided the helpful process that were required to nurture the small enterprises in the form of reservation of items

for their exclusive manufacture, access to bank credit on priority through the priority sector lending program of commercial banks, excise exemption, reservation under the government purchase program and 15% preference in purchases, infrastructure development and establishment of institutes for entrepreneurial and skill development.

"The Small Industries Service Institutes (SISI) now known as MSME Development Institutes were setup all over India to train youth in skills, and the tool rooms were established with German and Danish assistance for providing technical services essential to small enterprises for skilled training."[6] District Industry Centers (DIC) was setup at the state level all over the country.

2. 1991-1999 —

"A new policy related to Small, tiny and village enterprises was launched in August 1991 .This policy laid by government in the context of liberalization which required to replace the protection with competitiveness to impart more strength and growth to small enterprises in the face of foreign competition and open market.

Improving infrastructure, technology and quality was the primary focus of policies. The Small Industry Development Bank of India (SIDBI) was established to enhance the small sector industries. And a technology development modernization fund was produced to accelerate technical and financial services to the sector.

3. 1999 onwards —

The ministry of MSME (earlier known as ministry of SSI and Agro and Rural Industries) came into being from for concentrating on development and promotion of MSME. The new policy package announced in Aug 2000 directed to assist in eliminating the problems of credit, infrastructure, technology and marketing.

To encourage technology up gradation in the MSME sector a credit linked capital subsidy scheme was the only source for credit financing scheme to provide guarantee free loans to micro and small entrepreneurs, particularly the first generation entrepreneurs. The exemption limit for relief from payment of Central Excise duty was raised to Rs 1 crore ($0.25 million) and a Market Development Assistance Scheme for MSMEs was introduced. At the same time, meetings were held with all the stakeholders and the list of products reserved for

production in the MSME sector was slowly reduced each year. In 2006, the long awaited enactment for this sector finally became a reality with the passage of the Micro, Small and Medium Enterprises Act."

However the new definition is that India still does not take into account the number of people employed. Globally, the two most important elements used to define MSMEs remain turnover and employment. This decision of new definition of not including the employment criterion may be because of inability of the system to cross check employment figures in a transparent manner. The practice of underreporting number of people employed is widespread especially in smaller units to remain below the threshold of 10 employees to save on very high social security and compliance costs. Lack of labour reforms has exacerbated the situation."[7]

"In March 2007, a third troll for the enhancement of Small and medium Enterprises was launched which comprises the facilities having direct impact on the promotion and development of the micro and small enterprises, especially in view of dynamic economic environment, wherein survival of the fittest was the only option."[8]

After 2007, the government was interested in

i.   Creating jobs, careers, and new products/services.

ii.   Economic growth, productivity improvement, and innovation.

iii. Poverty alleviation and social opportunities.

iv.   Create new customers and open up new markets.

There has been a shift toward encouraging greater "social entrepreneurship" particularly in rural areas. Awareness of the potential which entrepreneurship may offer for promoting social inclusion is growing worldwide. Much of this emphasis placed by Governments is focused on assisting target groups to start up micro enterprises, usually by means of the provision of low cost micro finance.

In 2015, the Micro Units Development & Refinance Agency Ltd (MUDRA) was set up by the Government of India (GOI). MUDRA has been initially formed as a wholly owned

subsidiary of Small Industries Development bank of India (SIDBI) with 100% capital being contributed by it.

This Agency would be responsible for developing and refinancing all Micro-enterprises sector by supporting the finance Institutions which are in the business of lending to micro / small business entities engaged in manufacturing, trading and service activities. MUDRA would partner with Banks, MFIs and other lending institutions at state level / regional level to provide micro finance support to the micro enterprise sector in the country.

1.1.4 Definitions of MSME:

"MSMEs are enterprises involved either in manufacturing or service activities on a commercial basis with the following limits on financial investments. The SMEs in the Manufacturing and Service sectors as defined by the Micro, Small & Medium Enterprises Development Act, 2006 are presented below in Tables 1.2 and 1.3 respectively.

Table – 1.2 : Small Medium Enterprises in Manufacturing Sector

Manufacturing – Investment in Plant & Machinery		
Description	**INR**	**USD($)**
Micro Enterprises	Upto Rs. 25Lakh	Upto $ 62,500
Small Enterprises	Above Rs. 25 Lakh & Upto Rs. 5 Crores	Above $62,500& Upto $1.25 million
Medium Enterprises	Above Rs. 5 Crores & Upto Rs. 10 Crores	Above $ 1.25 million & Upto $ 2.5 million

Source-Micro, Small & Medium Enterprises Development Act 2006

Table – 1.3 : Small Medium Enterprises in service Sector

Service – Investment in Equipments		
Description	**INR**	**USD($)**
Micro Enterprises	Upto Rs. 10 Lakhs	Upto $ 25,000
Small Enterprises	Above Rs. 10 Lakhs& Upto Rs. 2 Crores	Above $ 25,000& Up to $ 0.5 million
Medium Enterprises	Above Rs. 2 Crores & Upto Rs. 5 Crores	Above $ 0.5 million & Up to $ 1.5million

Source - *Micro, Small & Medium Enterprises Development Act, 2006*

Small and Medium Sector consists of enterprises which are usually run under proprietorship, either by a Hindu undivided family, an association of persons, a co-operative society, a partnership or an undertaking or any other legal entity."

1.1.5   Role of Micro Small and Medium Enterprises

Production cost of SME is less as compared to large scale industries. SMEs have smaller capital investments and are labor intensive in India. This is why small and medium enterprises are very significant as for countries like India where more output at lower cost and more employment are equally important. Countries like Japan and China are on this track especially in the rural areas.

Nanda[9] (January, 2016) in his paper states "MSMEs have contributed to economic development in several ways, like generating employment openings for both rural as well as urban people, supplying goods and rendering services at reasonable costs by innovating solutions, improvising material for sustainable development of national economy. SMEs in India face a variety of problems – scarcity of sufficient and timely banking, avenues to raise finance, non-accessibility of appropriate technology, lack of proper marketing strategies, and shortage of skilled manpower." Globalization and domestic reforms have major emphasis on SME sector in India. SMEs had felt pain on many counts like growth, employment,

performance, exports and issues arising out of these. Subrahmanya (2004)[10] SME sector friendly government policies have opened doors to new opportunities for development for SMEs. SMEs have faced the challenges of newer technology, lack of financial facilities and infrastructure Government's pro Small and Medium enterprise policies assist SME to be more competitive at the domestic as well as international level. Country has achieved remarkable export earnings and is characterized by low investment requirements. It offers operational flexibility, ease of mobility, lesser imports, ability to manufacture home grown technology, and improvisation which impacts cost reduction. All these are making India highly competitive in domestic as well as global markets. This has givenan impetus to the entrepreneurship and in turn to the SME sector, which is now responsible for nearly 45 percent of national industrial output and contributes to 40 percent of exports As per MSME annual report 2017-18. Although a large number of SMEs are unregistered, they are significantly contributing to national wealth. It is growing regularly at 11.5% per year as per MSME annual report 2017-18. This count to be greater than the total GDP growth which is at the rate of 8 percent[11]The SME sector has impacted Indian economy to a great extent. It has kindled hopes in the minds of young entrepreneurs and motivated them to develop indigenous alternatives and technologies..

SMEs have demonstrated development in the last few years. However, the sector has faced quite a few constraints which have resulted into wasteful resource management. It culminates into hampering the growth and development of SMEs. The enterprises become vulnerable and result into economic slowdown mainly due to scarce financial management, which is the major blockage to their development.

India has a strong network of SMEs, which produce material for the consumption of the large industries as raw or ancillary products or services. This provision of subsidiary support system ranges from agriculture to aviation. Developed countries have long been dependent on products and services of SMEs for their survival. They provide processed products to the large scale industries. It thus becomes a tool of sustenance.

1.1.6 State-wise Distribution of estimated MSMEs

"State of Uttar Pradesh had the largest number of estimated MSMEs with a share of 14.20% of MSMEs in the country. West Bengal comes as close second with a share of 14% again. The top 10 States together accounted for a share of 74.05% of the total estimated number of MSMEs in the country."[12] Figure 1.1 and Table 1.4 shows the distribution of estimated enterprises in top ten States.

Figure 1.1 :Number of estimated MSMEs (in lakh)
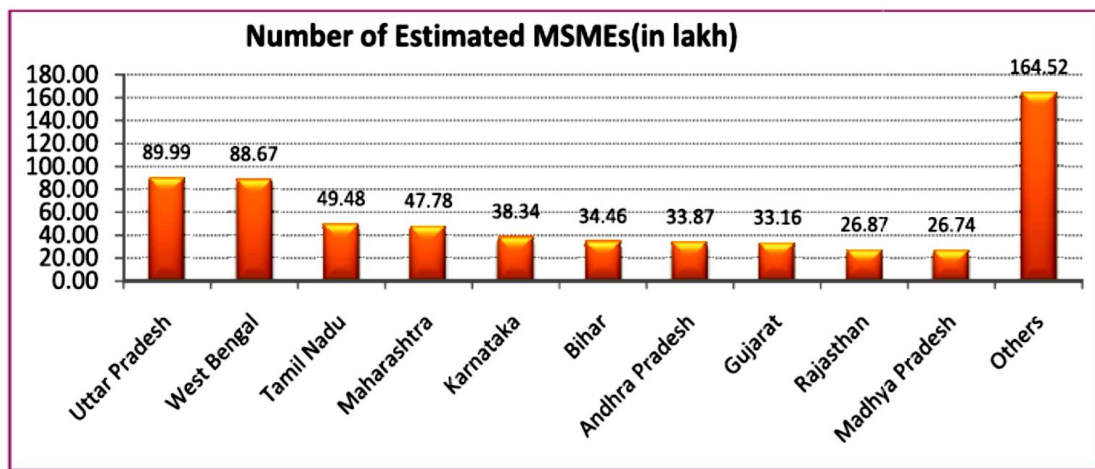
Source- District Council report MSME –annual report MSME 2017-18

Table – 1.4 : State-wise Distribution of estimated MSMEs

Sl. No.	State/UT	Estimated number of enterprises (Number in lakh)			
		Micro	Small	Medium	MSME
1	Andhra Pradesh	33.74	0.13	0.00	33.87
2	Arunachal Pradesh	0.22	0.00	0.00	0.23
3	Assam	12.10	0.04	0.00	12.14
4	Bihar	34.41	0.04	0.00	34.46
5	Chhattisgarh	8.45	0.03	0.00	8.48
6	Delhi	9.25	0.11	0.00	9.36
7	Goa	0.70	0.00	0.00	0.70
8	Gujarat	32.67	0.50	0.00	33.16
9	Haryana	9.53	0.17	0.00	9.70
10	Himachal Pradesh	3.86	0.06	0.00	3.92
11	Jammu & Kashmir	7.06	0.03	0.00	7.09
12	Jharkhand	15.78	0.10	0.00	15.88
13	Karnataka	38.25	0.09	0.00	38.34
14	Kerala	23.58	0.21	0.00	23.79
15	Madhya Pradesh	26.42	0.31	0.01	26.74
16	Maharashtra	47.60	0.17	0.00	47.78
17	Manipur	1.80	0.00	0.00	1.80
18	Megahlaya	1.12	0.00	0.00	1.12
19	Mizoram	0.35	0.00	0.00	0.35
20	Nagaland	0.91	0.00	0.00	0.91
21	Odisha	19.80	0.04	0.00	19.84
22	Punjab	14.56	0.09	0.00	14.65
23	Rajasthan	26.66	0.20	0.01	26.87
24	Sikkim	0.26	0.00	0.00	0.26
25	Tamil Nadu	49.27	0.21	0.00	49.48
26	Telangana	25.94	0.10	0.01	26.05
27	Tripura	2.10	0.01	0.00	2.11
28	Uttar Pradesh	89.64	0.36	0.00	89.99
29	Uttarakhand	4.14	0.02	0.00	4.17
30	West Bengal	88.41	0.26	0.01	88.67
31	A & N Islands	0.19	0.00	0.00	0.19
32	Chandigarh	0.56	0.00	0.00	0.56
33	Dadra & Nagar Haveli	0.15	0.01	0.00	0.16
34	Daman & Diu	0.08	0.00	0.00	0.08
35	Lakshadweep	0.02	0.00	0.00	0.02
36	Puducherry	0.96	0.00	0.00	0.96
	ALL	**630.52**	**3.31**	**0.05**	**633.88**

Source- Annual report MSME 2017-18

Many SMEs provide final and finished products to the consumers, thus becoming self-sufficient from raw material to the supply of the finished products.. This gives SMEs to innovate and improve their products on a continuous basis. And also reenergizes the SME sector to a great extent and propels the economy onto the path of development.

Figure 1.2 represents the composition of MSMEs in rural and urban area in India. It is noted that MSMEs are more concentrated in rural sector.

Figure 1.2 : Percentage share of rural and urban MSMEs in the country
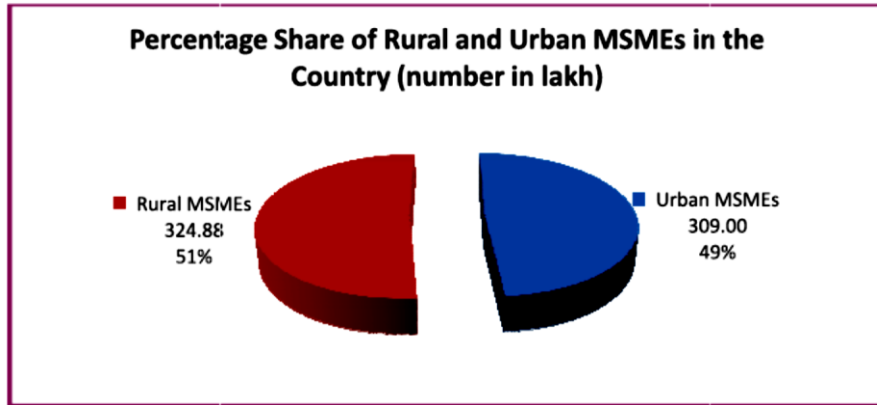
Source- Annual report MSME 2017-18

1.1.7   The Performance of MSMEs in India

Governmental as well as non-governmental organizations are trying their best to make SMEs enhance their presence and output. With skill enhancement, better networking, and using ever innovative technology are the main reasons for the successful development of SMEs in India. The sector has ventured in all the realms of business from handicraft to homemade products to large machines. All these products have successfully captured domestic as well as global markets.

Table – 1.5 : Performance of SSI sector

Year	Units (Million nos.)	Production (Rs Billion)		Employment (Million nos.)	Production per Employee (Rs thousand)	SSI Export	
		At constant prices	At current prices		At constant prices	Rs. Billion	US $ Million
1	2	3	4	5	6	7	8
1981-82	0.96	783.00	326.00	7.50	104	21.00	2309
1982-83	1.06	847.00	350.00	7.90	107	20.00	2116
1983-84	1.16	935.00	416.00	8.42	111	22.00	2093
1984-85	1.24	1046.00	505.00	9.00	116	25.00	2137
1985-86	1.35	1181.00	612.00	9.60	123	28.00	2263
1986-87	1.46	1336.00	723.00	10.14	132	36.00	2851
1987-88	1.58	1505.00	873.00	10.70	141	44.00	3372
1988-89	1.71	1699.00	1064.00	11.30	150	55.00	3790
1989-90	1.82	1899.00	1323.00	11.96	159	76.00	4579
1990-91	6.79	847.28	788.02	15.83	54	96.64	5386
1991-92	7.06	873.55	806.15	16.60	53	138.83	5632
1992-93	7.35	922.46	844.13	17.48	53	177.84	6140
1993-94	7.65	987.96	987.96	18.26	54	253.07	8068
1994-95	7.96	1087.74	1221.54	19.14	57	290.68	9258
1995-96	8.28	1211.75	1477.12	19.79	61	364.70	10903
1996-97	8.62	1348.92	1678.05	20.59	66	392.48	11056
1997-98	8.97	1462.63	1872.17	21.32	69	444.42	11958
1998-99	9.34	1575.25	2104.54	22.06	71	489.79	11642
1999-00	9.72	1703.79	2337.60	22.91	74	542.00	12508
2000-01	10.11	1844.01	2612.97	24.09	77	697.97	15278
2001-02	10.52	2822.70	2822.70	24.93	112	712.44	14938
2002-03	10.95	3067.71	3148.50	26.02	116	860.13	17773
2003-04	11.40	3363.44	3645.47	27.14	122	976.44	21249
2004-05	11.86	3729.38	4297.96	28.26	130	1244.17	27690
2005-06	12.34	4188.84	4978.42	29.49	140	1502.42	33935
2006-07	36.18	11988.18	135.14	80.52	149	1825.38	40309
2007-08	37.74	13227.77	14351.79	84.20	157	2020.17	50202
2008-09	39.37	13755.89	15242.35	88.08	156	-	-
2009-10	41.08	14883.52	16193.56	92.18	161	3911.59	82494
2010-11	42.87	16536.22	17215.53	96.52	171	5077.39	111403
2011-12	44.76	17885.84	18343.32	101.17	177	6301.05	131483
2012-13	46.75	18099.76	-	106.14	171	6981.66	128316
2013-14	48.86	-	-	111.43	-	8068.78	133364
2014-15	51.06	-	-	117.13	-	8492.48	138894
2015-16	-	-	-	-	-	8553.52	130651

Source :Ministry of Micro, Small & Medium Enterprises, Government of India.

"Ministry of MSMEs has reported that during FY07 – FY11, there is a phenomenal growth at the rate of 4.5 per cent in the development of SMEs and at the end of FY 2011 it stood at 31.2 million(Rs.)."[13] The aggregate investments in SMEs rose to Compound Annual Growth Rate of 11.5 percent during the same time. Robust progress in total investments in SMEs points out their increasing imprint and emerging prominence. SMEs are gradually becoming more responsible for generation in employment in India.[14]During FY year 2014-15 employment in SMEs rose to 73.2 million and it has reached 1471912.94 crores.

Figure 1.3 : Employment in SMEs.

Employment (in lakh)

805.23 842 880.84 921.79 965.15 1,011.69 1,061.40 1,114.29 1,171.32

2006-07 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15
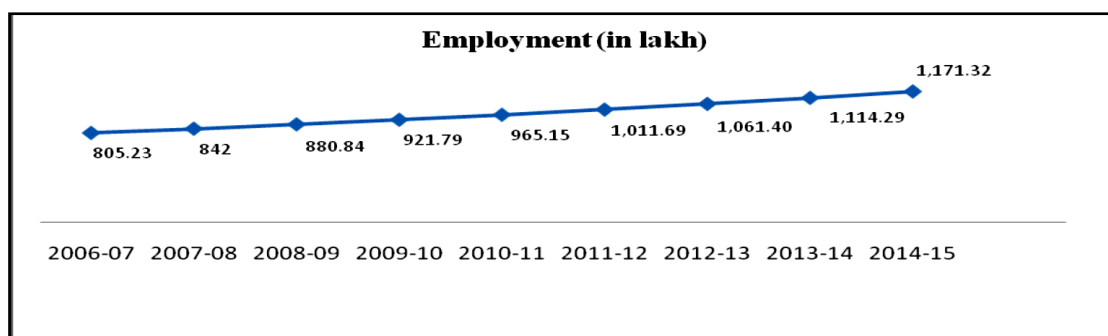
Source- Annual report of MSME chamber

As per the National Sample Survey (NSS) 73rd round conducted during the period 2015-16, MSME sector has been creating 11.10 crore jobs (360.41 lakh in Manufacturing, 387.18 lakh in Trade and 362.82 lakh in Other Services and 0.07 lakh in Non-captive Electricity Generation and Transmission) in the rural and the urban areas across the country.

Table – 1.6 : Distribution of MSMEs activity wise

Broad Activity Category	Employment (in lakh)			Share (%)
	Rural	**Urban**	**Total**	
Manufacturing	186.56	173.86	360.41	32
Trade	160.64	226.54	387.18	35
Other Services	150.53	211.69	362.22	33
Electricity*	0.06	0.02	0.07	0
All	497.78	612.10	1109.89	100

Source- Annual report of MSME chamber

*Non-captive electricity generation and transmission

Figure 1.4 : Distribution of MSMEs activity wise
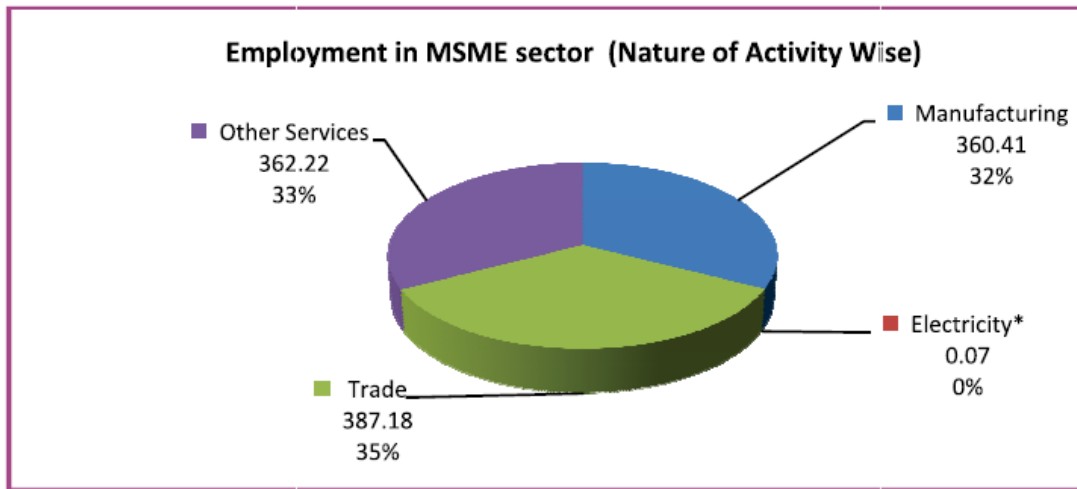
Employment in MSME sector (Nature of Activity Wise)

Other Services 362.22 33%
Manufacturing 360.41 32%
Electricity* 0.07 0%
Trade 387.18 35%

Source- *Annual report of MSME chamber*

*Non-captive electricity generation and transmission

"The MSMEs are widening their domain across sectors of the economy, producing diverse range of products and services to meet demands of domestic as well as global markets."As per the data available with Central Statistics Office (CSO), Ministry of Statistics & Programme Implementation, the contribution of MSME Sector in country's Gross Value Added (GVA) and Gross Domestic Product (GDP), at current prices for the last five years is as below:

Table – 1.7 : Growth of MSME in Gross Value Added

(Figures in Rs. Crores adjusted for FISIM[3] at current prices)						
Year	MSME GVA	Growth (%)	Total GVA	Share of MSME in GVA (%)	Total GDP	Share of MSME in GDP (in %)
2011-12	2583263	-	8106946	31.86	8736329	29.57
2012-13	2977623	15.27	9202692	32.36	9944013	29.94
2013-14	3343009	12.27	10363153	32.26	11233522	29.76
2014-15	3658196	9.43	11481794	31.86	12445128	29.39
2015-16	3936788	7.62	12458642	31.60	13682035	28.77

Source: RBI reports 2016-17

"Comparative Analysis between Fourth All India MSME Census (2006-07) and NSS 73rd Round (2015-16) Comprehensive information on the MSME Sector can be obtained from both Fourth all India MSME Census was held in 2006-07 and the NSS 73rd Round (2015-16). Being held almost 10 years time gap, a comparison of the two sets of results can capture the growth of the basic parameters of the MSME Sector over a decade."[15]

Table - 1.8 : Growth of MSME

Parameter	NSS 73rd Round*, 2015-16	Fourth All India Census of MSMEs, 2006-07	Annual Compound Growth Rate (%)
No. of MSMEs (Total)	633.88	361.76	6.43
Manufacturing	196.65	115.00	6.14
Services	437.23	246.76	6.56
Employment (Total)	1109.89	805.24	3.63
Manufacturing	360.42	320.03	1.33
Services	749.47	485.21	4.95

* Service includes Trade, Electricity & Other Services.

Source: Fourth all India MSME Census,RBI Report

"MSMEs have shown consistent growth in terms of number of Entrepreneurs Memorandum (Part II) / [EM-II] filed every year. Number shows that MSME sector registered consistent growth in terms of number of EM-II filed every year. Number of EM-II filed during 2007-08 in the DICs across the country was 1.73 lakh. This has increased continuously during 2007-08 to 2014-15 periods, which shows that even in adverse environment, both internal and external, the entrepreneurs have shown their courage and had firm belief in the economic fundamentals of the economy."[16] Thus, year wise numbers of EM-II filed during 2007-08 to 2014-15 EM-II has shown continuously rising bars in the below bar diagram:

Figure 1.5 : Number of EM-II Filed during 2007-08 to 2014-15

Source-Development commissioner report

1.2   NEED AND IMPORTANCE OF THE STUDY

Small and Medium Enterprises (SMEs) have played a crucial role in India's economic growth. In the year 2014-15 more than 30 million units manufacturing SMEs contributed towards 6.11 per cent of the country's GDP. The service sector's contribution to GDP was 23.28 percent, and totally SMEs as a sector's contribution to the GDP was 29.39%.

Small & Medium Business Development Chamber of India projects the share of SMEs in the expansion of the Indian economy to increase to 40 per cent of the GDP in 2017. This assessment is supported by its supposition that by 2016 - 17 approximately 15 million additional people would be joining the SME sector. SME units have currently employed 1,117.32 lakhs people in the year 2014-15. As per All India census of MSMEs, share of MSME manufacturing output in total manufacturing output is 33.40% in 2014-15.[17]

SMEs play significant role in the economy of many developed and developing countries across the globe.

Table – 1.9 : State-Wise Distribution of Registered Functioning SMEs

Geography	No of Enterprises (In lakhs)	Employment (In lakhs)	Original value of plant & machinery (in Rs. crore)	Market value of fixed investment (in Rs. crore)
Maharashtra	47.78	48	12384.89	54365.37
India	510.6.	1173	105024.61	449138.40

Source- MSME District council report

"Maharashtra contributes approximately 6 percent of total registered functioning SMEs in India. However, SMEs suffer from major challenge of high rate of devastation and many enterprises may not even progress beyond infancy. Sustenance and success to grow into a big enterprise is, though a dream for all enterprises, is achieved by only a very few.

Table - 1.10 : State/Union Territory-wise number of sick MSEs (at the end of March)

Geography	2011	2012	2013	2014	2015	2016
Maharashtra	9,992	10136	31,322	40,365	49,293	46,549
India	90141	85,591	2,47,289	4,65,492	4,65,226	4,80,280

Source: RBI Reports

The causes of failures are attributed to many factors, which impede on the progress and cause sluggishness. These are difficulty in accessing the credit, regulatory framework, management issues, market barriers and education and training. Therefore present study is aimed at investigating the factors affecting the performance of SMEs enterprises within Maharashtra in India. Such research gaps has necessitated to study on the subject.

The developmental process of liberalization and global market integration has opened up enormous prospects for the sector, along with new challenges. The new ambitious National Manufacturing Policy (2016), which aims to make India a manufacturing pivot and upsurge the sectoral stake to 25 per cent in the next decade from the present level of 15-16 per cent, necessitates extensive backing from SME sector and significant hike in the growth rate of MSME sector from the existing level of 12-13 % per annum."[18]

This demands merging of hard work and resources. MSMEs are going through an evolutionary phase including redesigning of policies, strategies and amenities since the announcement of new policies in 1991 and thereafter reformist implementation of liberalized and globalized policies in India.   The change in the Government's approach of looking at the MSME sector and regulatory facilitation should reflect in reducing the hurdles.

"Internal factors like financial parameters, viz., working capital, capital structure, cash flows etc also plays an important role for the growth of SMEs. Financial performance analysis helps in identifying the financial strong points and weaknesses of the firm by properly studying the relationship between the items of balance sheet and profit and loss account.

The main objective of conducting this study was to obtain the in depth details of financial factors affecting the performance of SMEs in Maharashtra. The research targeted SMEs enterprises in Maharashtra and the unit of analysis comprised owners-managers of various sectors manufacturing businesses, training, healthcare, consultants, hospitals, hotels, jeweller, trading and finance. It is helpful in short-term and long-term prediction of the trajectory of

growth by means of financial performance analysis. The relationship between the items in the balance sheet and profit and loss account are analyzed for determining the financial strong and weak areas of the SMEs in Manufacturing sector and Service sector. This study includes the scanning of the financial statements to judge profitability, solvency, stability, growth and prosperity of a SME."

1.3   RESEARCH PROBLEM

"An analysis of financial factors affecting the performance of selected SMEs with special reference to   Maharashtra state."

1.4   OBJECTIVES OF THE STUDY

1. To study the financial position and performance of SMEs in the state of Maharashtra.

2. To analyze the sustainability and performance of selected SMEs.

3. To analyze the efficiency of financial management in selected SMEs.

4. To undertake intra and inter sector comparison of manufacturing sector and service sector of selected SMEs.

5. To present summary of the key findings of the study and to make suitable suggestions for the improvement of further successful survival of SMEs in the competitive world.

1.5   FINANCIAL PARAMETERS USED IN THE STUDY

Financial performance analysis is the process of analyzing and determining the operating and financial characteristics of a firm based on accounting and financial statements[19]in the study Financial performance is assessed using following parameters of SMEs:-

1   Solvency Analysis

2   Liquidity Analysis

3   Working Capital Analysis,

4   Profitability Analysis

5   Capital Structure analysis

1.6 RESEARCH DESIGN

The present research is a study of the financial performance of the SMEs in Maharashtra. It has attempted to evaluate the financial stability and operational health of different sectors. The present position of financial performance of SMEs, their operational efficiency, the challenges they face can best be studied using descriptive research. Hence the researcher has used descriptive design for this research. SMEs preserve the Authentic financial data for limited years hence using five years accounting year in depth study have been conducted to understand overall picture of selected SMEs.

1.6.1   Data Collection

The research is based on Secondary data from SMEs. This study is mainly based on the annual audited balance sheets, profit and loss account, cash flow statements, official records of the SMEs and annual reports and other records published by the company.

Further data is also collected from the report of Comptroller and Auditor General of India, RBI Reports, Economic Survey of India and Centre for Monetary Indian Economy (CMIE), various websites of Government of Maharashtra and Government of India

1.6.2   Period of Study

The time frame of the study is five years i.e. from 2010 – 2011 to 2014 – 2015.

1.6.3   Sampling Frame

Number of SMEs listed in BSE SME Exchange aremaximum in number from Gujarat (76) followed by Maharashtra (70) and Delhi (33).19 SMEs are from West Bengal and 17 from Rajasthan; Telangan, Andhra Pradesh and Chattisgarh have also contributed. The total number of listed SMEs over BSESME Exchange of Maharashtra are 70 SMEs.

1.6.4 Sampling Technique

The list of all the registered SMEs on the website was used to decide upon the total population. The researcher identified 12 SMEs using simple random method. Out of 70 of total population sample of 12 was identified by lottery method. These 12 selected SMEs were further divided in Manufacturing and service sector for in depth understanding of SMEs and inter sector comparison. The main reason of selecting this technique was its feasibility with reference to time and cost and as it is concern with financial status of the SME as the biggest constrain is to gather the financial declarations from SMEs.

1.6.5 Sampling Size

Sample is an objective representation of the population, which is used for generalizing about the entire population having similar traits. 12 SMEs were identified for the present study comprising of 5 SMEs are of Manufacturing sector and 7 SMEs are of Service sector.

1.6.6 List of selected SMEs

Sample is taken from SMEs situated in the region of Maharashtra state. The selected industrial companies for the purpose of the present study are given as follows:-

Manufacturing Sector

1   Bajaj Healthcare Ltd

2   Filtra consultants & engineers ltd

3   Ganga pharmaceuticals ltd

4   Valiant organic ltd

5   Patdiam jewellery ltd

Service sector

1   DRA Consultants Pvt Ltd

2   Suyog Telematics ltd

3   Comfort Commotrade ltd

4   Jupiter info media ltd

5   Cawasji Behramji Catering services Ltd

6   Mitcon Consultancy &Engineering Services Ltd

7   Creative Peripherals and Distribution Limited

1.6.7   Techniques Used for Data Analysis

This research study has attempted to analyse and interpret the financial performance and operations by employing ratio analysis techniques along with other the financial tools.

The statistical tools like mean, percentages standard deviation, correlation and regression analysis has been used to analyze the data, the map, graphs, column charts are also used for some supportive and meaningful interpretation.

Comprehensive Index is used for further statistical analysis. Rational behind to create Comprehensive Index is to bring all the ratios on similar platform to carry out further investigation using advance statistical technique.

Comprehensive Index has been created using following formula:

$CI = 1-(max\ x(i)-x(i))/max\ x(i)$

Where X(i) is Particular Ratio, max X(i) is maximum ratio of particular ratio

Logic of Comprehensive Index is convert maximum value of particular ratio into 1 and relative value subsequently using above formula.

Kruskal Wallis test is applied which is the non parametric equivalent to the omnibus F test in a one way ANOVA (which is used with matrix dependent variable).Correlation and regression analysis were applied to examine data and draw conclusions about the financial relationships among existing variables. Correlation analysis was used to measure the degree of association between two financial variables.

Application-specific computer software has been used for graphical presentation of data wherever found appropriate. For the purpose of evaluating the performance of SMEs under study, Annual Financial Reports of the units were of great importance, which give host of financial information.

1.6.8 Hypothesis

Following Hypothesis have been framed for the purpose of this study

I) Hypothesis Testing Using Kruskal Wallis test

1 Solvency Analysis

A) Manufacturing Sector

Ho- Average Fixed Asset to long term funds ratio across SMEs within manufacturing sector of Maharashtra are alike.

Ho- Average Debt to Asset ratio across SMEs within manufacturing sector of Maharashtra are alike.

Ho- Average Degree of financial leverage across SMEs within manufacturing sector of Maharashtra are alike.

Ho- Average overall solvency of SMEs within manufacturing sector of Maharashtra is alike.

B) Service Sector

Ho- Average Fixed Asset to long term funds ratio across SMEs within service sector of Maharashtra are alike.

Ho- Average Long Debt to Total Asset ratios across SMEs within service sector of Maharashtra are alike.

Ho- Average Degree of Financial leverage across SMEs within service sector of Maharashtra are alike.

Ho- Overall solvency across SMEs within service sector of Maharashtra are alike.

2 Liquidity Analysis

A) Manufacturing Sector

Ho- Average current ratio across SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average quick ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average cash to current asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average current asset to total asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average current asset to total asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average overall liquidity SMEs within manufacturing sector of Maharashtra is alike.

B) Service Sector

Ho- Average Current ratio across SMEs within service sector of Maharashtra are alike.

Ho- Average Quick ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Cash to current asset ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Current asset to total asset across SMEs of Service sector in Maharashtra are alike.

Ho- Average Liquid asset to current asset across SMEs of Service sector in Maharashtra are alike.

Ho- Average Liquidity ratio across SMEs of Service sector in Maharashtra are alike.

3   Working capital Analysis

A) Manufacturing sector

Ho- Average working capital Turnover ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Sales to current asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Debtors turnover ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Credit strength ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Working capital SMEs within manufacturing sector of Maharashtra is alike.

B) Service Sector

Ho- Average Working Capital Turnover ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Sales to current asset ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Debtors Turnover Ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Credit Strength Ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Working capital across SMEs of Service sector in Maharashtra are alike.

4   Profitability Analysis

A) Manufacturing Sector

Ho- Average Net profit ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Return on capital employed SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Return on assets SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Return on Net worth SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Return on asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Profitability SMEs within manufacturing sector of Maharashtra is alike.

B)Service Sector

Ho- Average Degree of Net Profit Ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Return on capital employed across SMEs of Service sector in Maharashtra are alike.

Ho- Average Return on Asset across SMEs of Service sector in Maharashtra are alike.

Ho- Average Degree of Return on net worth across SMEs of Service sector in Maharashtra are alike.

Ho- Average Return on Asset ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Degree of Profitability across SMEs of Service sector in Maharashtra are alike.

5 Capital structure

Ho- Average Debt equity ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Proprietary ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- Average Total debt to asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Ho- overall capital structure of SMEs within manufacturing sector of Maharashtra is alike.

Service Sector

Ho- Average Debt Equity Ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Proprietary Ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Debt to Asset Ratio across SMEs of Service sector in Maharashtra are alike.

Ho- Average Capital structure Ratio across SMEs of Service sector in Maharashtra are alike.

II)   Hypothesis testing using t test

Ho-There is a no significant difference in average of financial parameters viz. solvency, Liquidity, Working capital, Profitability, capital structure across manufacturing sector and service sector of SMEs in Maharashtra.

Ho- Average of ratios across the service and manufacturing are alike.

III) Hypothesis testing using Correlation

Manufacturing Sector

Ho -There is no significant correlation between Solvency and Profitability.

Ho- There is no significant correlation between Liquidity and Profitability.

Ho   -There is no significant correlation between Working Capital ratio and Profitability of SMEs of Manufacturing sector in Maharashtra.

Ho- There is no significant correlation between Capital Structure and Profitability of SMEs of Manufacturing sector in Maharashtra.

Service Sector

Ho -There is no significant correlation between Solvency and Profitability of Service sector in Maharashtra.

Ho- There is no significant correlation between Liquidity and Profitability of Service sector in Maharashtra.

Ho   -There is no significant correlation between Working Capital ratio and Profitability of SMEs of Service sector in Maharashtra.

Ho- There is no significant correlation between Capital Structure and Profitability of SMEs of Service sector in Maharashtra.

1.6.9   Scope of the study

The present study has covered SMEs for both the manufacturing and service sectors in the state of Maharashtra. The sample has been selected from various sectors. To sustain in the competitive market SMEs will have to be viable and profitable, which will help the national economy grow and further develop. To be profitable and sustainable they have to earn the profit at least equal to the rate of interest on their borrowings from all the sources. The study has covered the challenges faced by the SMEs and measured the financial performance of the same. The results of the study are generalizable to the SMEs in Maharashtra.

1.6.10   Significance of the study

The results of the study will be useful to the SMEs for improving their financial performance. It will provide Government to frame appropriate guidelines for the growth and development of SMEs. The present study deals with the financial appraisal of the SMEs, which evaluates past, current and projected performance and, thus, is intended to give a picture of the overall growth of financial performance of the SMEs in Maharashtra. Financial factors are most important as far as challenges are concerned. It has become important to study the challenges faced by SMEs and also the factors that drive their financial performance. The present study has planned to study the same.

1.6.11 Limitations of the study

1   The sample size and the period of study are limited.

2   This study hasn't considered the non financial factors that can influence the performance of SMEs.

3   SMEs are mostly working as ancillary units and more often they deal in seasonal goods. This can pose huge variability in their income**.**

4   Exact correlation and effect of various factors in financial Management   on the profitability is not recognized.

5   The majority of the financial management practices studies are related to large companies which may not be practically applicable to small units.

1.6.12 Organization of Study

The study has been divided in seven chapters.

Chapter I: Introduction:

First Chapter deals with a brief introduction of the MSMEs and its economic significance in the Indian context. This chapter also includes a brief explanation about the objectives of the study, methodology, need for the study followed by scope and limitations of the study.

Chapter II: Literature Review:

This Chapter discusses the past studies in the field of performance of Small and Medium Enterprises. A literature review is designed to identify the past research, to understand the scope of current research within a past records and theoretical understanding. It contains in-depth study of prior research on the subject.

Chapter III: Profile of the Maharashtra State SMEs:

This Chapter presents overall Industrial outlook of Maharashtra state with special reference to the SMEs.

Chapter IV: Conceptual framework of Financial Performance:

This chapter emphasizes on explanation of the financial performance, which includes four broad concepts, viz.

(1)   Financial Strength and Capital Structure - covering capital structure, theory of capital structure, its determinants, leverages and cost of capital;

(2)   Working Capital Management - this includes working capital policy, profit criterion of working capital, operating cycle analysis, cash management, receivables management, inventory management and determination of working capital finance mix; and

(3)   Financial Appraisal Tools - this covers financial statements analysis

(4)   Financial Strength Model i.e. Springate model which analyses the financial creditability of company

Chapter V:Profile of Selected Small and Medium Enterprises

This chapter discusses the growth and development of selected Small and Medium Enterprises.

Chapter VI: Analysis of Financial Factors of Small and medium enterprises:

This chapter deals with the analysis of Financial Performance of Selected SMEs. Certain financial tools and statistical tools are used in interpretation of the financial results of selected SMEs.

Chapter VII: Conclusion and Suggestion:

This chapter covers the summary of earlier chapters in the form of conclusion and suggestions in improving the financial performance of Small and Medium Enterprises and further recommends the areas for further research.

1.7 CONCLUSION

This chapter has provided the basis of research study undertaken in the area of financial performance of SMEs in the state of Maharashtra. In order to understand the earlier research work carried out in this area, the researcher has provided the review of related literature in the next Chapter.

CHAPTER –2

LITERATURE REVIEW

"A great memory does not make mind, any more than dictionary is piece of literature."

John Henry Newman

SURVEY OF LITERATURE

2.1   PURPOSE OF LITERATURE SURVEY

In Chapter I, elementary information about the status of the industrial sector in India is presented with respect to the definition and the expanse of the units that fall under MSME, their locations and nature of activities in the state of Maharashtra. This has provided foundation for a sound understanding of the problem that the researcher has undertaken to investigate.

The present Chapter is related to the past studies taken place in this area. In order to get a broader perspective of the MSME sector the studies conducted outside the state/country are also included in the review. This is done with a purpose to understand if the challenges faced

across the industry in different geographies are similar and if the same solutions can be replicated for their resolution.

In order to make review meaningful, it has been presented in the following three sections:

I)   Studies related to SMEs in countries other than India,

II)   Studies related to SMEs in India and

III)   Studies related to financial factors affecting industry performance

2.2   STUDIES RELATED TO SMES IN COUNTRIES OTHER THAN INDIA

1   Babajide and Abiola (2011)[20] carried out "Impact Analysis of Microfinance in Nigeria and studied about the financing restraints approach to identify whether microfinance institutions' enhanced access to credit for micro enterprises in Nigeria works or not. According to this approach, microenterprises with upgraded access to credit rely less on internal funds for their investments. They compared investment sensitivity to internal funds of micro . (a municipal with significant presence of Microfinance Banks (MFBs) with that of micro enterprises in Ekiti State (a municipal with no (or limited) presence of MFBs). They conducted a cross sectional study and collected data about Microfinance Institutions (MFI) branch location. The study conclusions reveal that MFBs eased micro businesses' financing constraints."

"This approach is used in appraising microfinance impact in other countries as well. The influence of Small and Medium Scale Enterprises (SMEs) on nation's economy has been accepted as main sustenance of the economy because of their capability in augmenting the economic productivity and thus enhancing human welfare. The SMEs' suffer from paucity of access to relatively cheap and good source of finance. These have been acknowledged as the major factors obstructing their contribution to economic growth."

"The researchers assessed specific financing options available to SMEs in Nigeria and their relationship with economic growth via investment level. Indicators were

appraised to measure the financial performance of SMEs."The correlation coefficient between SMEs financing and investment level was 0.643 (significant at 0.1 level of significance).

"It has shown that there is a significant positive relationship between SMEs financing and economic growth in Nigeria via investment level." Higher the SME financing, significantly higher is the economic growth. Hence the SMEs should be provided low interest rate finances to propel national economy."

2   Mwaniki, Moffat Karo (2012)[21] conducted "research on 'Factors affecting performance of small and medium enterprises in Kenya: A case study of SMEs in Thika Municipality'.

The study concluded that most SMEs in Thika Municipality fund their businesses from loans from bank, family and relatives; personal savings; loans through government institutions; and through Non-Governmental Organizations."

"Respondents accessed finance for their businesses from all possible sources including commercial banks, NGOs, micro finance institutions, government institutions, and SACCOs. What prevented them from borrowing money from the banks was the fear of losing the property."   Moreover the banks required collateral and had high interest rates which is why they disliked borrowing from the banks. The study concluded that marketing is the main obstacle forthe enterprise performance. The owner managers marketed their products using print media as newspaper classifieds, pamphlets, and leaflets. Word of mouth helped them to some extent in marketing their product. They opined that red tapes attitude in the bureaucracy in registration offices hampers SME growth. Corruption affected their legitimate rights as beneficiaries. Compliance and tax cost being high coupled with complex custom system adversely affect the growth prospects of the enterprise. To top it all government support was also very minimal.

3   Kamunge, Njeru & Tirimba (2014)[22] studied "the Factors affecting the Performance of SMEs in Limuru Town Market of Kiambu County, Kenya. The study concluded that facility to use finance and having administrative and managerial experience are the important socio-economic factors impacting the outcome of businesses in Limuru

Town Market. These two have the potential of leading to improved business performance".

"The other significant factors that were found to impact performance of SMEs in Limuru Town Market positively are: right to use to business information, supportive government policy and regulations and facility of infrastructure."

4   Research by Afeef (2011)[23] aimed to study "the potential effect of working capital management on the profit performance of SMEs in Pakistan. Effect of working capital management was studied on profitability of a sample of 40 Pakistani SMEs listed in Karachi Stock Exchange for a period of six continuous years from 2003 to 2008. The researcher scrutinized totally 240 (40X6) firm-year observations. Correlation analysis was conducted to decide the relationship between efficient working capital management and corporate profitability for the sample under study while the Multiple Regression analysis was employed to explore the combined interactive effect of the variables of working capital management on profitability of selected firms. Results of the analyses revealed that indicators of working capital management had an appreciable impact on financial performance i. e. profitability of firms under study."

5   Jaimin R. Vasa April (2016)[24] while doing a comparative study of SMEs' Contribution In India And China: -- A Study Of Selected Sectors concluded that the SMEs under chemical sector, Pharma sector and Textile Sector have grown significantly in both the countries continuously with almost similar growth rate during the study period.

The production capacity and utilization of capacity of SMEs in China was bigger than Indian SMEs and even smallest SME unit in any sector was five to six time bigger than Indian SMEs in terms of production, productivity, labor, employment and export. Despite of huge growth of SMEs in India in 2006-07 by inclusion of several existing small industries under SME fold, the position of SMEs in India was found trivial in compare to China. The progress of Chinese SMEs of all the selected sectors were found extra ordinary because the policies of Chinese government to promote the SME sector by providing several supports like cheaper labor, low cost raw material. For the growth and development of SMEs under chemical, pharma and textile sectors in China, "research suggest that to provide SMEs with plenty of financing opportunities,

the government should strive to develop corporate bond market, and allow some SMEs, which have good operating conditions, to enter the bond market for financing."

6   Voulgaris ,D. Asteriou ,G. Agiomirgianakis[25] "The aim of this paper was to identify what factors contribute to manufacturing SMEs growth in Greece.

Factors found to influence significantly manufacturing small firm growth in Greece are: • profitability of total assets (positively) • liquidity (negatively) • long-term debt reliance (positively) • employee productivity (positively) • credit policy (negatively) and • fixed assets turnover (negatively) Business size (smaller is better) was shown significant when entered by itself, but its significance decreased when other explanatory variables were added. Also, in the case where Total assets were used as size variable, it did not show any significance at all. Since in most firms the number of employees does not change significantly throughout all years, we just have the same vector in both regressions and the only effect goes to the constant."

7   Kinyua (2014)[26] studied "Factors Affecting the Performance of Small and Medium Enterprises in the Jua Kali Sector in Nakuru Town, Kenya' and concluded that SMEs who have easy access to finance had the potential to significantly and positively influence performance of SMEs in Jua Kali Sector, however access to finance were yet to be fully utilized to the advantage of the SMEs in the study area. Management skills had the capability to positively and significantly influence the performance of SMEs and yet had only been marginally adopted by the SMEs in the study area. Similarly, the study came to conclusion that the effect of macro environment on performance of SMEs was positive and significant especially on production output despite being moderately rated among the SMEs. Finally, the study concluded that infrastructure was not statistically found to be significantly impacting the performance of SMEs in the study area."

8   Rym Ayadi and Emanuele Sessa (Editors) Hala Helmy El Said and Rana Hosni Ahmed (Egypt) Nooh Alshyab, Serena Sandri and Fuad Al Sheikh (Jordan) Mohamed Larbi Sidmou and Jad Allah Rami (Morocco) Rim Ben Ayed Mouelhi and Monia Ghazali Ferchichi (Tunisia) (2017)[27] The MSME sectors of Egypt, Jordan, Morocco and Tunisia, This last point is particularly important, considering that MSME sectors

in the countries under investigation are dominated by micro firms, most of which were established for subsistence reasons and consequently with low growth potential. These micro firms often take the decision to remain informal in order to avoid a number of administrative hurdles and costs that they are not willing or able to sustain, something that in turn further hinders their growth potential. In this sense, the dominance of micro firms, and especially the range of factors underlying their establishment as a subsistence solution, can be considered as the main determinant of widespread informality in the region.

9   Rufo R. Mendoza[28]"The correlation revealed that a significant linear relationship exists between liquidity and activity, liquidity and leverage, and activity and leverage. However, the three performance measures showed no significant relationship with profitability. Conversely, it is clear from the study that while the MSMEs have high scores on liquidity, leverage, and most aspects of activity, they suffer from low profitability. The t-test showed no significant difference in the liquidity, profitability, and inventory turnover of the enterprises when grouped according to the organizational form, business type, and asset size. Nonetheless, a significant difference exists in receivable turnover, asset turnover, and debt ratios." "The t-test revealed that single proprietorships have significantly higher receivable turnovers than corporations, while small enterprises have significantly higher receivable turnovers than both the micro and medium enterprises. Both manufacturing and trading businesses have significantly higher asset turnover than those engaged in services while small enterprises have significantly higher asset turnover than both the micro and medium enterprises. Corporations showed significantly higher debt ratio compared with sole proprietorships; manufacturing business, compared with trading business; and medium enterprises, compared with both micro and small enterprises. The subject MSMEs should revisit their strategies on the use of financial resources to maximize profit and the overall value of their business. Since liquidity, activity, and leverage have been the core advantages of these MSMEs, efforts should be geared towards improving profitability aspects."

10 Emmanuel Tweneboah Senzu and Haruna Ndebugri (2018)[29] suggested, "it largely caused by poor business environment as a result, most of the MSMEs collapse nearly in their 5th year, for a new born of ventures in a continual circle of this nature and this

call for an urgent critical look into Business policies of Ghana by the Ministry of Trade & Industry as the government arm in charge of business development. Largely most of the MSMEs engage in business transactional records that lack quality accounting records to affect performance of business. Hence government interest should be shifted to this direction as well, as a vital sector of the economy to support the difficulties in addressing this issues of quality records keeping for a sustainable and profitable ventures that stand to significantly contribute to the macro economy of Ghana."

11 Bassey Ina Ibor, Amenawo Ikpa Offiong , Enyeokpon Samuel Mendie[30] "This study concludes that there is significant relationship between financial inclusion and the growth of micro small and medium scale enterprises in Nigeria. That financial inclusion policy significantly and positively impacts on the operations of micro, small and medium scale enterprises. However, distance to finance financial services access points and infrastructural deficiency could challenge how fast and effectively micro, small and medium scale enterprises would access financial services in Nigeria."

12 OECD Report[31]SMEs are lagging behind in adopting digital technologies. While, in most countries, the divide is narrow for simple connectivity and web presence, the gap broadens when considering participation in e-commerce and, especially, more sophisticated applications. For instance, across OECD countries, enterprise resource planning (ERP) software applications to manage business information flows are popular among large firms (more than 75% adoption rate in 2014) but less used by SMEs (less than 20%). In many countries, a large adoption gap is also observed for cloud computing, i.e. the renting of computer power from an external provider, which can allow smaller firms to use Big Data, while overcoming some of the barriers associated with the high fixed costs of ICT investment.

13 Bergthaler W., Kang K., Liu Y., and D. Monaghan (2015)[32] Debt-distressed SMEs in Europe face a number of challenges in restructuring. Their large numbers, small size, and weak balance sheets increase the fixed costs and risks to banks of restructuring. Despite recent reforms, insolvency systems and out-of-court workout frameworks in Europe are still ill-suited to the particular needs of SMEs, limiting their usefulness. Difficulties in foreclosure have also slowed the pace of loan resolution, contributing to the backlog of tackling small and medium sized enterprise problem loans in Europe

international monetary fund 27 corporate debts over hangs. If left unaddressed, SMEs' high levels of indebtedness and bad loans will remain a drag on the recovery and financial stability.

2.3 STUDIES RELATED TO INDIAN INDUSTRY AND SMES AND SMES IN MAHARASHTRA

14 Margaret Mutiria (2017)[33] this study established the existence of a significant relationship between measures for enhancing access to SME financing and actual access to SME financing, the study recommends that government intervention like youth funds should be enhanced to allow more young entrepreneurs in SME businesses to access financing. The study also concludes that there is need for commercial banks and other financial institutions to provide exclusive bank loan products to SMEs, and, Micro-finance loan products to SMEs should carry sufficient finance skills training on business finance management, loan application, and loan repayment. Finally, the study recommends that rotating savings and cooperating associations (ROSCAs) should also be enhanced since they are essential and necessary channels for enhancing SMEs access to financing.

15 Madiha Shafique Dar 1 ,Shakoor Ahmed 2 and Abdul Raziq[34]

Credible definition will operate as a functional key in the formulation and effective monitoring of SMEs. It activates the policy makers who can create a benchmark to gauge progressive improvements in SMEs standards and working. The paper projections hope to persuade the government officials and SMEs to come together in order to remove the degree of diversity and conflicts among SMEs definitions as the current definitions vary greatly in proportions to national economies. It concludes that the definition by employment, assets and turnover has multiple advantages.

16 Uma (2013)[35] stresses that "all industrial and business organizations have to take up the accountability to meet the challenges posed by globalization.

Not only the large size businesses, but even a small and medium size businesses enterprises in India has to undertake the responsibility to meet the stringent global

standards, excellent qualities, technological up gradation, skills technical know-how needed in the global market for sustaining in the competition. Forty years ago, economist Ernst Friedrich Schumacher published in Britain his book 'Small is Beautiful' in which he argued in favour of human-scale, decentralized and suitable technologies which small businesses could tie together effectively. It means that even a small scale unit functioning anywhere in India has to fulfil the standards set by the international titans who operate in India." For all the units --- including those who make final products as well as auxiliary or skilled workers.

17 Desai (1983)[36] stated that "SMEs has vast capability in terms of generating occupations and output, up-gradation of export, development of base for indigenous entrepreneurship and Diaspora of businesses and entrepreneurship skills in both rural as well as backward areas. Desai also stated that rapid industrial development in India rests on the progress of SMEs. Most of the SMEs are functional under some hindrance like scarcity of raw materials, low levels of technical knowledge and counselling, poor setup structures, insufficient capital and credit facilities, improper logistics system, lack of amenities for market analysis, research and development. They are also weak in marketing their products beyond their localities especially in international markets."

As per the India's New Industrial Policy, 1991, "the industrial Reforms (1991) were introduced in five areas namely Industrial Licensing, Foreign Investment, Foreign Technology Agreements, Public Sector Policy and Monopolies and Restrictive Trade Practices Act (MRTP). The government permitted foreign investments with a limit of 51% in industries that required the use of advanced technology and large scale investments."

"The terms of agreement with reference to the transfer of technology was left to beneficiaries of the contract with minimal government interference. Regarding the MRTP Act, major attention was paid on monitoring unfair trade practices. No mandate of the central government was necessary for setting up and expansion of business units and mergers."

18 Selvaraj and Balajikumar (2015)[37] "while studying 'Financial Institutional Assistance and Support to Small-Scale Industries in Tamil Nadu – A View' concluded that the

both Central and State Governments have established numerous institutions and centres to support small scale industries. Their functions include project appraisals, construction of infrastructure facilities, distribution of raw materials, provision for machinery on hire-purchase scheme, reservation of items for production by small scale industries."

Many financial institutions have introduced various schemes to reduce the financial load of the small-scale units.

19 Lama (2013)[38] conducted a research on 'Micro, Small and Medium Enterprises (MSMEs) In India-Problems and Prospects' and came to the conclusion that "MSMEs have turned out to be as an engine of growth in Indian economy by way of their substantial impact to GDP and industrial production. The MSMEs are required to increase its productivity; efficiency and quality reduce costs and innovate."

"Government policy should help MSMEs to increase their competence and attractiveness within a market driven economy. In order to avert the most important sickness in MSMEs, new approaches like the cluster approach or connecting the power of industry association should be encouraged. To keep this growth engine on the precise route and direction, it is necessary to put emphasis on the formulation of friendly policies, conducive operating environment, improvement of proper infrastructure, securing peace and security, arranging proper finance, efficient manager and arranging appropriate modem technology for MSMEs."

20 Venkataramanaiah and Parashar (2007)[39] in their paper titled 'Enhancing the competitiveness of SMEs through industrial clusters: "The Indian experience', stated that Indian industry is undergoing a major change due to the liberalisation, privatisation and globalisation (LPG) of the economy. Many investors and corporate organisations from developed economies are looking at India as one of the best locations for their global operations. The role of SMEs is becoming increasingly crucial for meeting the growing demand of both domestic and overseas firms operating in India. In transition economies like India and China, SMEs provide the best example of the alterations in proprietorship structures, business philosophy and values; and entrepreneurial behaviour. The SMEs that survived the downturn in 1990s have emerged as competitive global players."

"Many small and medium size organisations are on the way to becoming medium and larger ones. Many SMEs are trying to enter the stock market by going in for the initial public offer (IPO) channel to raise funds, but the money (stock) market is still not yet SME-friendly. The inherent strength of SMEs and their potential for growth have nonetheless started winning them the sympathy of many banks, financial institutions (FIs), state financial corporation's (SFCs) and other support agencies. "

21 Raju (2008)[40] in his working paper titled 'Small and Medium Enterprises (SMEs): "Past, Present and Future in India' mentioned that Small and medium industry enjoys a status of tactical significance in the Indian economic structure due to its noteworthy impact and contribution in terms of output, exports and employment. Small industry has been one of the most important floor boards of India's economic expansion policy since Independence."

"India bestowed high urgency status to small and medium enterprises (SMEs) from the very beginning and drafted support strategies to make these enterprises sustainable and pulsating and over time, these have become key providers to the GDP. Despite many protection and policy measures for the past many years, SMEs have remained commonly small, technologically regressive and deficient in competitiveness."

22 Chandak (2016)[41] presented a paper on "Challenges faced by Micro and Small Enterprises in raising bank finance: A special reference to Micro and Small Enterprises in Nagpur' and concluded that the lack of responsiveness about finance schemes shows that enterprises do not understand how they can benefit out of them." In micro enterprises, Most of the borrowers are first generation entrepreneurs don't have experience of doing business and contributing in project.

Feeble business plan results in the rejection of business proposal by banks. Unavailability of credit history acts as barrier in financing to micro enterprises. Banks consider MSEs as risky projects. Increasing NPA in public sector banks is also one of the chief causes for credit crunch. The majority of problems due to which banks do not finance are due to lack of collateral, poor financial statement, no past experience, risky project, lack of infrastructure etc., in Nagpur city. Dynamic changes are observed in the global business market. Bank policies do not prefer to finance the low performing sector in economy.

23 Anil Bhardwa[42], "The new MSME definition in India: good or bad? Why? Debates"

SMEs definition in India is always a question as it is suitable to define SME as per plant and machinery or Investment as there is other opinion of limiting the definition to turnover of companies or as per employees involved in the unit. There is always pros and cons, as per 2006 act definition owners have run behind charted accountant for certifying their investment and machinery. "The definition was framed in 2006. After 12 years, with regular devaluation of value of Rupee it reflects impractical limits. Readjusting for inflation rate can enhance the limit by 2-3 times."

24 Nilesh Shah,[43] Challenges that SMEs face today, Live mint news article ,First Published: Wed, Apr 25 2012. In this article, 'Challenges that SMEs face today' state that "The SME sector is facing continuous demand on productivity and efficiency gains from their large counterparts. These demands require investments in business on a regular basis.

Reward for making such investment is not proportionate to the capital and efforts that are put in. This, in turn, is affecting investments by SMEs. Upcoming entrepreneurs are constrained by the rising cost of establishing the business, availability of finance and increasing complexity of doing business. Technology start-ups are obviously an exception to this due to the low capital requirement. SME exchange is a good beginning to provide equity to this sector.

Encashment of SME business value has not yet picked up as the merger and acquisition opportunities are limited due to emotional attachment to the business (till it is too late to detach) and the difference in the perception of value."

25 Ghatak's (2010)[44] article on "Micro, Small and Medium Enterprises (MSMEs) in India": "An Appraisal", state that Banks show their reluctance to extend credit to small enterprises because of increased managerial costs of small-scale lending due to Asymmetric information as well as perceived high risk and want of security or collateral. Credit guarantee schemes diminishes the risk suffered by moneylenders and are mainly are action to small firms' lack of warranty".

"Such schemes do have the potential to minimize the costs of small-scale lending and to improve the data and evidence available on borrowers. They enable small firms to

get formal credit and also better the conditions of a loan. Such schemes assist small enterprises to obtain finance for working capital, investment and/or leasing purposes at reasonable conditions."

This helps SMEs to improve in the market attractiveness and to extend their economic activity. "Weaknesses of credit guarantee schemes can be circumvented through appropriate design and involvement of private sector. More support is needed for MSMEs from the government in the form of priority sector lending, government procurement programme, credit and performance ratings and marketing help. Technology transfers (such as green technology) and networking can help MSMEs to recuperate and grow healthy."

Morakar (2012) in his study titled, 'Problems and prospects of small scale industries of Goa: a geographical study', state that, "the Small Scale Industries are not free from challenges as the policies of deregulation and de-reservation have resulted into increased competition for the MSME sector. Due to the globalization the labour force has changed tremendously and made a way for getting avenues according to their skills and has helped to improve the life style. A recurrent opinion in industry and policymaking bodies that there is lack of skilled labour to cater the need to meet out the demand for the product. Hence, there are many openings for skilled workers."

26 Mishra[45] in 'SME's: "A Booster of India's Economic Growth" mentioned that SME's are facing many challenges in India such as lack of sufficient and need base credit, and high charges for credit, contractual expectation, lack of knowledge about marketing, problems related to storage space, designing, packaging and product display, unawareness how to entrance to international marketplaces lack of adequate services, including power, water, roads, outdated know-how and deficiency of access to modern equipment, lack of skilful manpower for operation handling and other functions of business.

He further suggested that, for the improvement of SME's in India, various measures can be adopted by government of India such as proper availability and cost effective credit, assistance in marketing, increase Productivity, technology up gradation and modernization, promotion skill development, improvement of infrastructure facilities,

fixing incentives/tax related issues, proper development of institutional framework etc.

27 Anju Singla and Parul GroverCredit (2012)[46] is "an important element for growth and sustainability of MSMEs. Therefore, there is an opportunity for banks to enhance loans to MSMEs because in financing large corporate, the risk is concentrated among few units, whereas in case of same amount of loans to the MSME sector, the risk would be spread over a large number of units. Proper infrastructure is required for the MSME sector to facilitate access, availability and use of funds which would give MSMEs an equal platform to compete, manage and sustain in the age of globalisation."

28 D.Sudarsana Murthy[47]the entrepreneurs are facing a plethora of problems in the functional areas of operation and promotion and other related areas of management. Their contribution to industrial development is unique and noteworthy. It is high time to explore new strategies and programmes to promote entrepreneurship in the country. "In the current scenario for the SSI sector to achieve economic efficiency and international quality standards, there is an imminent need to upgrade its technology. While the setting up of the Technology Bank, as announced in the comprehensive policy package for MSMEs would facilitate technology transfer and match making, creation of a separate Small Industries Development Fund at the earliest would meet the much needed financial requirements of the sector for mass scale technology up gradation. The suggested fund would also provide access of resources for infrastructure, marketing development and other similar requirements of the sector. These measures are expected to help in accelerating the pace of growth of the sector."

29 Papiya Manna , Dr. Tapas Mistri (2017)[48] Micro enterprises occupied the leading position naturally in all states but some developed states like Gujarat, Tamil Nadu, and Goa ,south; Himachal Pradesh, Punjab, Haryana in the north and the north eastern states like Arunachal, Mizoram, Manipur, Nagaland and Tripura are improving their small and medium scale enterprises also. States like West Bengal, Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh and Orissa where small and medium enterprises are lesser in number. There is seen a normal path that those states who are leading in working enterprises, creates more employment, generate more income and do registration whether filling EM-II or UAM. Though registration through UAM has

shown a rocket speed increase but people are far behind of registration may be due to lengthy process of filling forms or they are not aware at all particularly at the rural set up or they are unwilling to register their units to escape the tax. All states are not capable of utilizing the fruits of MSM

2.4 STUDIES RELATED TO FINANCIAL FACTORS AFFECTING INDUSTRY PERFORMANCE

30 Abdulaziz, Abdulsaleh & Andrew (2013)[49] reviewed the literature on the various financing resources of SMEs with reference to their effect of both on quality and those of the sole owner and manager based business. They have cited a number of papers authored by research scholars like Ou & Haynes, (2006); Cook, (2001) which concluded that finance is a major factor in the growth, development and success of SMEs.

31 Jindrichovska (2013)[50] while studying Financial Management in SMEs, noticed that "financial management is ignored by a small enterprise owner-manager; or as is often done, given to an accountant to take care of. Whether it is apparent or not to the casual spectator, in affluent small enterprises the owner-managers themselves have a strong understanding of the ideologies of financial management and are actively involved in applying them to their own situation. The issues related to SMEs would arouse further theoretical and empirical contributions on this seemingly neglected but important area of small business research."

32 Popa and Ciobanu (2014)[51] suggested that in order to enumerate the performance two parameters should be considered – "the return on equity and the return on invested capital."

For each of them they verified the influence of fixed assets, turnover, price earnings ratio, duration of current assets by turnover and leverage. The results were significant for most of them, and the regression models were valid with a coefficient of determination of more than 60%. If solvency ratio is higher, than the amount of debt is higher and this leads to higher costs for the company. These costs will adversely influence the net income and profitability which can be seen from our results. The

coverage of the cost of debt (interest) shows the company's capability to pay remuneration external investors. If a SME succeeds to cover many times their cost it means that it has a profitable operating activity and the investment brings profitability for the SME and low risk for banks.

"Return on invested capital is positively influenced by turnover, interest coverage and current assets turnover and negatively by the leverage and surprising by the growth opportunities. Turnover, as in the case of ROE, has a positive influence, which was expected given that both rates consider the net income and capital invested by shareholders."

"In the case of return ratios is normal for a company that has a high level of coverage of the cost of debt to generate greater confidence to shareholders. The leverage has a negative influence overall, because a high value of it can mean a high cost of debt and therefore higher interest rates and an increase of ROIC. The result recorded on growth opportunities it is surprising."

"Given the economic situation in recent years this indicator reached high levels due to interest on loans which is added in the determination of the indicator. Thus, excessive debt it is unreliable for the shareholders."

33 Prof. Ravindra B. Gawali1 , Dr. Ashutosh Gadekar[52] "Financial Management Practices in Micro, Small and Medium Enterprises-An Exploratory Analysis with the help of Literature Review, International Journal of Research in Finance & Marketing , Vol. 7 Issue 6, June – 2017 The literature findings sighted managerial inefficiency as a root cause and poor financial management as a predominant reason responsible for MSMEs failure. Hence study concludes that the financial skills and knowledge of MSMEs owner-manager needs to be improved so that with the use of modern scientific financial tools and techniques better financial management decisions can be taken which are essential for survival, growth and profitability businesses."

34 Vohra and Dhillon (2014)[53] worked on "Best Financial Practices Lead Financial Performance of SMEs". Their study provided several insights on the association between financial management practices and SMEs financial performance.

Authors argued that this relationship is facilitated by various financial planning capabilities. The research attempt has proposed several hypothesis concerning financial forecasting & budgetary Planning, working capital availability, financial reporting and analysis, inventory management capabilities, and all were empirically and statistically confirmed the same.

One reason why financial forecasting & budgetary planning capabilities contributed most to the financial performance because of pre-hand estimation of required funds, revenue and cost and it makes it one of the most vital aspects of financial performance. While working capital availability, financial reporting & analysis capabilities also contributed significantly as expected, but the slight contribution of inventory management capabilities is beyond belief.

35 Nyakang'o and Kalio (2013)[54] conducted research on the "Effect of Financial Risks on Performance of SMEs in the Hotel Industry in Nakuru Municipality, Kenya. On the basis of correlation analysis results, the study came to conclusion that cash-flow risks and credit risks were found to be negatively related to revenue from food and accommodation.

This implied that cash-flow risk and credit risks are responsible for the observed reduction in revenues from food and accommodation in the hotels. Nevertheless, regression analysis results confirm that the identified financial risks (cash-flow risks, credit risks and profit risks) did not significantly influence the performance of the businesses in the hospitality industry but in most cases they negatively influenced performance especially the revenues from food and accommodation."

36 Xu (2012)[55] examined "the impact of the Factors on the Financial Performance of Firms Listed on Shanghai Stock Exchange. He examined the impact of factors, including liquidity, asset utilization, leverage and firm size on financial performance of firms.

It is positive to have high consideration of utilizing the company assets efficiently. Because the assets utilization of the company is an important factor as it influences its market share. If assets utilization increases, unit cost will decrease. Lower unit costs, in turn, should allow firms to cut and sustain lower prices and gain market share without lowering profit margins."Increasing asset utilisation is the best option listed

companies can work on. Great attention should be paid to leverage. Highly leveraged organizations run the risk of bankruptcy or insolvency if they are unable to pay back their debts or loans. Company's credit history gets tarnished and it may adversely affect their chances of getting lenders in future. Debt should be reduced by the listed forms for the better performance.

37 Gopinathan (2009)[56] has discussed about the Financial Ratio testing for Performance evaluation. To derive intelligence out of the enormous amount of numerical data given in the reports and documents submitted.

It helps in appraisal of the performance of a company, so that investors can choose to invest in that company. Different ratio categories on different aspects of performance such as profitability ratios, liquidity ratios, debt ratios, performance ratios, investment evaluation ratios are considered for deciding the financial health of the company.

38 Sambasivam and Ayele (2013),[57] revealed that "the growth, leverage, volume of capital, size and liquidity are the essential contributing factors of profitability. But the liquidity ratio and leverage ratio are negatively correlated with the profitability ratios. The age of companies' existence and solidity of assets are not significantly related with profitability."

39 Karamjit Singh (2002),[58] used "Z Score Analysis for Evaluation of Financial Health of Textile Mills." He found that the variation capital structure varies depending upon the size of the companies. The study supported the traditional viewpoint that up to a certain point, increase in financial leverage will depend upon the value of the firm. Beyond this limit increasing financial leverage will lead to increasing weighted average of the composite cost of capital. This will further affect the value of the firm which will eventually decline.

40 Verma (2005)[59] studied the influence of liquidity ratios on profitability. "The study showed both negative and positive association. Out of seven liquidity ratios, five ratios namely current ratio, acid test ratio, current assets to total assets ratio and inventory resource ratio showed negative association with profitability ratio. The remaining three ratios, namely working capital turnover ratio, receivable turnover ratio and the cash turnover ratio showed positive relationship with the profitability

ratio. The financial effectiveness of the TISCO Ltd is significantly and positively influenced by inventory ratio, receivable turnover ratio and cash turnover ratio."

2.5 RESEARCH GAP

The foregoing reviews of existing literature on the subject reveal that though many studies on the small-scale industries have been carried out in India as well as abroad, yet no comprehensive study is devoted to analyze the effect of financial factors on SMEs feat in Maharashtra.

Literature review indicates that SMEs work as an important push factor for the growth of the gross domestic product and overall economy, be it a developed or developing Nations. However, SMEs have been reporting higher rate of failures with many enterprises fading at an infant stage. Very few of the SMEs grow to become big enterprises.

"The reason to this failure is pegged on the various factors that continue to inflict stagnation of the industry in terms of performance. They include -- lack of access to credit, policy and regulatory framework, management concerns, market obstacles and education and training."[60] Therefore this study is aimed at scrutinizing the factors affecting the performance of SMEs enterprises within Maharashtra in India. Such research gaps have necessitated to study on the subject.

This research employed the descriptive research design where by data collected was presented without the researcher influencing or biasing the findings in anyway. The research has considered SMEs enterprises in Maharashtra and the unit of analysis were owners-managers of manufacturing businesses, training, supermarkets, agriculture, estate agents and hospitals.

2.6 CONCLUSION

This chapter has dealt with the review of literature related to financial performance analyses which form the basis for planning of the thesis. After studying the available literature,

research gap has been identified. The next chapter provides an overview of Selected Small and Medium Enterprises from Maharashtra.

CHAPTER – 3

PROFILE OF MAHARASHTRA STATE

"When learning is purposeful, creativity blossoms. When creativity blossoms, thinking emanates. When thinking emanates, knowledge is fully lit. When knowledge is lit, economy flourishes."

—**A.P.J Abdul Kalam**

3.1   FOREWORD

This chapter has presented the profile of the state of Maharashtra. The major focus has been given to the industrial development in Maharashtra. And also includes in depth description of the SME sector in Maharashtra.

3.2   OVERVIEW OF MAHARASHTRA STATE

Brand Maharashtra: 'Magnetic Maharashtra -- Attractions Unlimited'

With a strong, future-oriented government at its helm, Maharashtra continues to be the destination for growing sector**.** The state of Maharashtra is fully industrialized and highly urbanized. Being a progressive state it has a literacy rate of 82.3 per cent. It is the second richest state in India on the basis of per capita income of its residents. Its geographical expanse is 3,07,713 sq. km and it is one of the largest state, which justifies its name. The financial and commercial capital of India, Mumbai, is at the heart of the state and its Capital city. As per Average capita income Mumbai is the heart of Maharashtra State and hence migrants are fascinated from the rest of Maharashtra and other states in India.

"The Maharashtra state is on the western coast of the Indian subcontinent and is lined by Arabian Sea as 720 km long coast. It is surrounded by the state of Gujarat and the Union Territories of Daman, Dadra and Nagar Haveli are to the North-West; on the Northern side is

Madhya Pradesh; South side is bordered by Karnataka and Goa; on the South-East lies state of Andhra Pradesh; and Chhattisgarh lies on the East."

Maharashtra has been divided into six divisions for administrative purposes viz. Amravati, Aurangabad, Konkan, Nagpur, Nashik, Pune which presented in Figure 3.1 below.

Figure 3.1 Regions of Maharashtra for administrative purpose

Source: Maharashtra State Development Report, 2005(Planning Commission)

3.3   ECONOMIC PROFILE OF MAHARASHTRA

"Maharashtra contributes for nearly 35.1 per cent of the country's total automobile output by value.[61]The state has well designed infrastructure which is beneficial for industrial development. The state has domestic as well as international airports which add to the betterment of the transportation facilities. Government of Maharashtra came up with a new policy for electronics sector – 'Electronics Policy 2016' to boost the industry. In the same year, the Government of Maharashtra formulated a new policy on Tourism -- 'Maharashtra Tourism Policy 2016,' to propel the income through tourism."

The Figure 3.2 below depict Gross State Domestic Product of Maharashtra from 2005-06 to 2015-16.

Figure 3.2 Gross State Domestic Product of Maharashtra at current prices
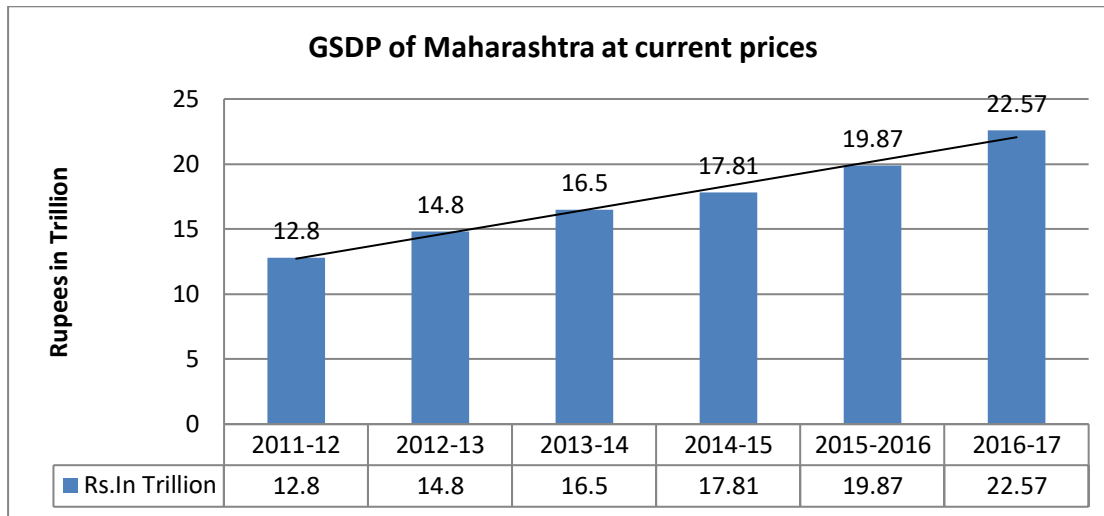
GSDP of Maharashtra at current prices

Rs.In Trillion	2011-12	2012-13	2013-14	2014-15	2015-2016	2016-17
Rs.In Trillion	12.8	14.8	16.5	17.81	19.87	22.57

Source-"Central statistics offices "advanced Estimates" reports provided by Directorate of Economics and statistics of Maharashtra"

Figure 3.3 : Net State Domestic Product of Maharashtra from 2005-06 to 2015-16
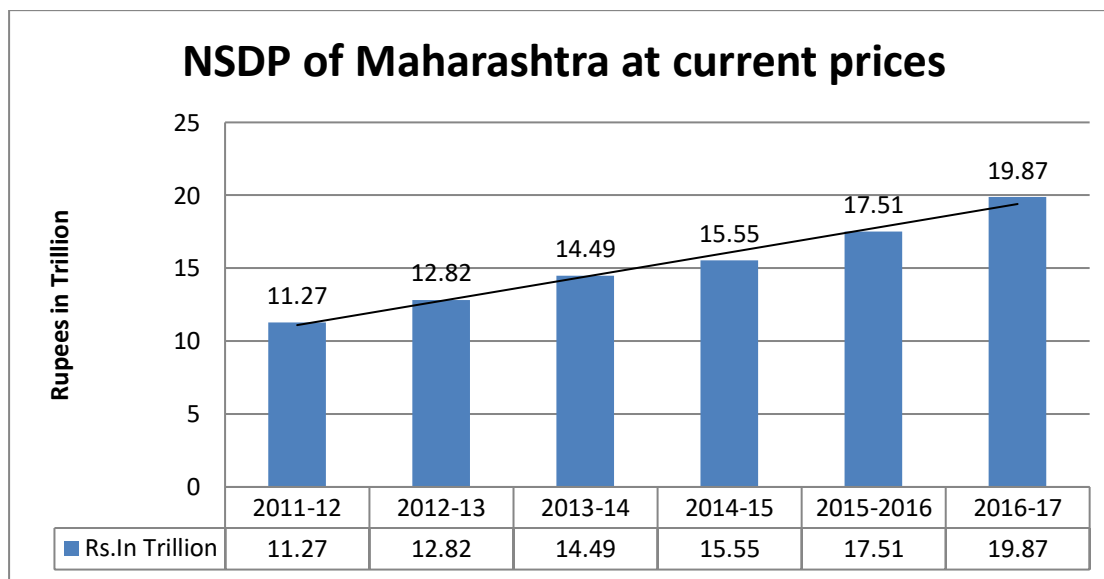
NSDP of Maharashtra at current prices

Rs.In Trillion	2011-12	2012-13	2013-14	2014-15	2015-2016	2016-17
Rs.In Trillion	11.27	12.82	14.49	15.55	17.51	19.87

Source-Central statistics offices "advanced Estimates" reports provided by Directorate of Economics and statistics of Maharashtra .

"The Indian economy is expected to grow by 7.1 per cent during 2018-19. The State economy is expected to grow by 9.4 per cent over the previous year, as per the advance estimates of real (at constant 2011-12 prices) Gross State Domestic Product (GSDP) for 2018-19. The 'Industry' and 'Services' sectors are assumed to shoe the growth at 6.7 per cent and 10.8 per cent respectively over the previous year 2017-18."[62]

Economic and Statistical Information

Number of Entrepreneurship Memorandum. Part II Filed (Region wise) reported by Directorate of Industries, Govt. of Maharashtra (From 01.04.2015 to 30.09.2015).

Table - 3.1 : Number of Entrepreneurship Memorandum. Part II Filed (Region wise)

Sl	Region	E.M. Filed
1	Konkan Region	3131
2	Nashik Region	1812
3	Pune Region	6980
4	Aurangabad Region	2593
5	Amravati Region	2059
6	Nagpur Region	1742
7	Mumbai & Suburban	1829
	Total	20146

Source-Report uploaded by DC (MSME),New Delhi

Table – 3.2 : No. Of Adhar udhyog registered in Maharashtra in the year 2015-2016

Year	State/UT	Udyog Aadhaar Regd.	Enterprise Type			Ownership			
			Micro	Small	Medium	SC	ST	OBC	Others
2015-16	Maharashtra	54,853	41,822	12,507	524	5,100	1,388	12,572	35,793
	All India	5,03,913	4,29,452	71,831	2,630	49,370	16,044	1,70,405	268,094
2016-17	Maharashtra	2,09,126	1,75,860	31,762	1,504	23,062	10,683	66,578	1,08,803
	All India	23,71,218	21,49,892	2,12,824	8,501	3,16,945	92,772	9,16,727	10,44,774
Cumula-tive (till 31ˢᵗ March 2017)	Maharashtra	2,63,979	2,17,682	44,269	2,028	28,162	12,071	79,150	1,44,596
	All India	28,75,131	25,79,345	2,84,655	11,131	3,66,315	1,08,816	10,87,132	13,12,868

Source-Report uploaded by DC (MSME),New Delhi

In Maharashtra about 2.44 lacs Micro, Small and Medium enterprises (MSMEs) were functioning until September 2015 providing employment to 29 lacs people and an investment of 56.5 crores of investment. According to the Sixth Economic Census there are 9.2 lakh establishments in the manufacturing (organised as well as unorganised) sector with approximately 29.2 lacs employment, out of the total employment of 61.5 lacs. Maharashtra has been investing in mega projects as well. The state has been employing the Mega Project Policy since 2005. Since inception to December 2016, 157 mega projects, out of the approved

488, are functioning, with an investment of approximately 66000 crores and have generated one lakh employment.

3.4   EXPORTS FROM MAHARASHTRA

"The main products exported from the state are gems & jewellery, petrochemicals, readymade garments, software products, cotton yarn, metal & metal products, agro-based products, engineering items, drugs & pharmaceuticals and plastic & plastic items.

Maharashtra became the best-performing State by shipping goods worth $72.83 billion in 2014-15. This is because Maharashtra has traditionally dominated the export business because of advantage in terms of coast line. Special Export-processing Zones (SEZs) have played an important role in promoting exports from the state. Cost and efficiency of the transport system are of paramount importance for staying competitive in export markets

In order to appreciate the efforts taken by the exporters and to promote exports the state as well as central governments are giving awards based on export performance. Along with this award space rent subsidy for participation in international exhibitions scheme is implemented for SMEs. From 2007-08 onwards the state's share remained at 27 per cent in the total exports from India."[63]

3.5   INDUSTRIES IN MAHARASHTRA

In the manufacturing sector Maharashtra hold significant place in the country. "The major manufacturing industries located in Maharashtra includes refined petroleum products, other chemical products, and basic chemicals, manufacturing of Jewellery, musical instruments, sports goods, games & toys etc., spinning, weaving and finishing of textiles, other food products, sugar, cocoa, chocolates, noodles etc., basic iron & steel and motor vehicles."

Table – 3.3 : Industrial Segments of Maharashtra State

1	Machinery	14	Textiles
2	Chemicals	15	Apparel & Clothing
3	Industrial Supplies	16	Fashion Accessories
4	Mineral & Metals	17	Gifts & Crafts
5	Energy & Power	18	Construction & Real Estate
6	Computer Hardware	19	Leather & Products
7	Computer Software	20	Jewellery & Gemstones
8	Electronics & Electrical Supplies	21	Home Textiles
9	Home Supplies	22	Packaging &paper
10	Office Supplies	23	Industry Segments
11	Health & Beauty	24	Business Services
12	Auto Parts & Accessories	25	Consumer Electronics
13	Agro Products & Commodities	26	Food & Beverage
		27	Others

Source- *Field survey DIC Office Aurangabad, published in Business Dairy - 2012*

Maharashtra state is segmented in Twenty five industrial zones. New products are being introduced in market but it has not come under the any segments, which can be taken in others[64]

"Mumbai-Thane-Pune belt holds the primary position as industrial zone in Maharashtra .almost 60 per cent of the State's output is accountable by Mumbai-Thane-Pune belt . Efforts are being made to promote other industrial areas like Nagpur, Nashik, Aurangabad, Solapur, Jalgaon, Raigad, Amravati and Ratnagiri, by building the necessary infrastructure and creating an environment conducive to industrial development."

The state is clustered into main industrial regions, namely, such as

1 Greater Mumbai,   2 Konkan, 3 Pune, 4 Nashik, 5 Aurangabad,

6 Amravati and 7 Nagpur.

- "The Greater Mumbai and Peripheries of the Suburbs in Thane and Raigad Districts. This is one of the most important industrial zones of India because it is located near the Gateway of India-commercial and economic capital of India. More than fifty per cent of

the factories and manpower are concentrated in this region. Textile was the largest group in the initial stage of development of industries but now engineering, chemical, transport, software and electronics are also other leading groups. Industries have dispersed from Mumbai to Thane, Kalyan, Ambernath, Badlapur and Panvel complex. this belt is extended upto Tarapur, Dahanu , the edge of Gujarat state."

"On Mumbai Bangalore and Mumbai-Panaji national highways Panvel is the main industrial centre The cluster SMEs of engineering, chemical, paper pulp and many small-scale industries in Khopoli at the base of Sahyadri as. Tata hydroelectric power generation station has an important role to play as the supplier of electricity to the neighbouring areas. A new industrial complex has come up at Pimpri-Chinchwad near Pune extending up to Talegaon. Pune-Ahmednagar, Pune-Solapur and Pune-Satara roads holds big factories manufacturing machines, automobiles, electrical and electronic goods, plastics and pharmaceuticals are located along the. Large factories are located at edge of old city ."

- Solapur Textile Zone "South East of Maharashtra have Solapur and Barsi cotton textiles centres. They have specialised in power looms. Maharashtra Industrial Development Corporation has developed many centres in Sangli, Kolhapur, Ichalkaranji, Madhavnagar and Miraj in Southern Maharashtra."

- Western Tapi Valley Industrial Zone

"Agro-based industries have developed in the Tapi valley. Cotton, groundnuts, banana and sugarcane are the agricultural raw materials in Khandesh (Dhule and Jalgaon districts). Recently MIDC areas are developed near Dhule and Jalgaon."

- Eastern Tapi Valley Industrial Zone

"This is the cotton-producing zone. Berarsi, Achalpur and Badnera are the leading industrial centres situated near the central railway line in the districts Amravati, Akola, Wardha, Chandrapur and Nagpur. Near Kamptee-Nagpur mineral based industries are well developed due to local coal, limestone and manganese mines. Here, engineering, transport equipment, cement and metal product manufacturing industries are located."

- Krishna –Panchganga Basin Industrial Region

"This is a unique triangular agro based region in Maharashtra. The region has industries like sugar and cotton textiles in Kolhapur and Ichalkaranji. Jaysingpur and Miraj place holds the establishments manufacturing and delivering agricultural elements, oil engines, engines spare parts and transport vehicles ."

- Pravara-Nira Valley Region

"This is a prosperous belt of sugar industries with Baramati, Phaltan, Koparagaon, Sangamner and Belapur as main centres. MIDC has developed small-scale industries and infrastructure."

- Upper Godavari Valley Industrial Belt

"This is the extension of Pune industrial region. Several industrial plants mostly of electronics and agriculture based are centrally located in and around Nashik ."

- Konkan Industrial Region

- "Near Mumbai-Goa national highway and Konkan railway line the development of Taloja, Roha, Patalganga, Mahad, Nagothane and Nanore in Raigad district; Chiplun, Loteparshuram, Ratnagiri, Dapoli and Sangameshwar in Ratnagiri and Kudal industries was possible only after establishment of MIDC industrial activities as subsidies and assistance was provided for expansion."

Initiatives by Government of Maharashtra

The following are some of the major initiatives taken by the government to promote Maharashtra as an investment destination:

- "In order to intensify the capacity of renewable energy sources in the state, the state government has professed a new energy policy, for which an investment of US$ 69.66 million has been proposed.

- The Government of Maharashtra is promoting the development of several Special Economic Zones (SEZs) across Maharashtra for sectors such as IT/ITs, pharmaceuticals, biotechnology, textile, automotive & auto components, gems & jewellery and food processing. As of December 2017, the state had 28 operational SEZs, of which the majority share is contributed by IT/ITs, engineering and electronics segment.

- 'The Government of Maharashtra provides single-window clearance to all units to reduce the average time required for establishment of such units and issue various clearances required for setting up of industries at a single point.

- The Government is focusing on providing IT-related infrastructure, fiscal incentives to IT units and an institutional framework for the IT sector.

- The Government is setting up the Delhi-Mumbai Industrial Corridor (DMIC), a mega infrastructure project of total cost US$ 90 billion, with the help of the Government of Japan, which has agreed to lend US$ 4.5 billion for this project. Seven nodes are in the development stage for the Phase-1 of the project, which is expected to greatly boost India's manufacturing sector.

- The Maharashtra government has set up an international biotech park in Hinjewadi, 10 km from Pune. This is the first public-private biotechnology park initiative in the state.

- Textile parks, aimed to provide world-class infrastructural components for the textile sector and enhance productive capacity, are being set up in Maharashtra to maintain its leadership position in textile exports and production.

- As a part of the 'Make in India' initiative, the state government in planning to come up with an electronics policy for companies interested to invest in this sector in Maharashtra."

3.6 APEX BODY SET UP BY MAHARASHTRA GOVERNMENT FOR GROWTH OF SMES IN MAHARASHTRA

Maharashtra Small Scale Industries Development Corporation

Maharashtra Small Scale Industries Development Corporation was established on October 19, 1962 with a view to give a new orientation and strength to the development of Small Scale Industries in the State of Maharashtra. "The main objective of MSSIDC is to aid, counsel, assist, finance, protect and promote the interests of Small Industries. The Corporation renders assistance to approximately 30000 SSI units in the State.

The Maharashtra Small Scale Industries Development Corporation (MSSIDC) assists entrepreneurs for the development of small scale industries.

The main activities of MSSIDC are:-

- Procurement and distribution of raw materials required by Small Scale Industries
- Providing assistance in marketing their products and making available facilities for warehousing and handling of material
- Assisting Small Scale Industries in import and export
- Helping handicraft artisans
- Organizing exhibitions

Maharashtra State Khadi and Village Industries Board

"The main function of the Maharashtra State Khadi and Village Industries Board (MSKVIB) is to organise, develop and expand activities of Khadi and Village Industries (KVI) in the State. Financial assistance of 28.43 crores in the form of subsidy was given to KVI units in 2014-15 and 29.02 crores were disbursed in 2015-16. Under Artisan Employment Guarantee

Scheme, employment opportunities were provided to 2.32 lakh artisans in 2014-15. During 2015-16, employment opportunities for artisans were 2.45 lakh."[65]

3.7   MAHARASHTRA   INDUSTRIAL   DEVELOPMENT CORPORATION (MIDC)

Development Corporation (MIDC) is a prestigious project of the government of Maharashtra. This was set up to promote entrepreneurial businesses by providing infrastructure like land, water and electricity. It has been providing facilities drainage, transportation and streetlights. The corporate philosophy of MIDC is the "Prosperity to all through Industrialization'.

The major objectives of establishing MIDC were:

- To set up industrial areas for planned and systematic industrial development

- To function as a special planning authority in development of industrial areas

The State Government is implementing following important programmes through MIDC:

- Establishment of growth centres

- Establishment of mini industrial area to cover all talukas in the state

- Setting up of 'Five starred industrial areas in the state.

- Construction of roads, drainage systems and provision for street lights in the industrial areas.

- Establishment of effluent collection and disposal systems for Chemical Zones. 6. Implementing Government/Semi Government Projects. Maharashtra Industrial

The first industrial area was started by MIDC was in 1962 in Thane district as Wagle Estate. MIDC has developed specialized parks for different sectors like chemicals, biotechnology, engineering, petrochemicals, automobiles and their components, electronics, textile,

transportation, consumer durables, information technology, pharmaceuticals, wine brewing, recycling and many such productions.

"The significant historical policy decisions taken by MIDC transformed the socioeconomic profile of the state as its activities spread to the remotest places in the interior of Maharashtra. This positively impacted the industrial scenario in the state.

MIDC developed five-star industrial areas at nine locations in Maharashtra taking into account the international standard facilities essential to attract global companies to invest in the state. At the close of financial year 2015–16 about 94 percent developed plots are allotted to entrepreneurs."

3.8   CO-OPERATIVE INDUSTRIAL ESTATES

Maharashtra state has commenced a programme of development of industries, where there is no MIDC zone. It has initiated supporting the industrial belt on cooperative basis. The state government contributes to share capital and provides technical guidance for establishing industries. To meet the cost of establishing such units is on a sharing basis. The project funding comes from the state (20 per cent of project cost), loans from the banks (60 per cent loans to be raised from bank/financial institutions) and members of the society (20 per cent is the contribution of the members of the society as share capital). By the end of September 2016, there were 107 industrial estates were functioning (out of 142 registered), 29 estates are yet to be commissioned and remaining 6 had filed for liquidation. These functional 107 co-operative industrial estates have generated about 1.8 lacks of employment opportunities. The state so far has funded 93 co-operative industrial estates.

3.9   FINANCIAL ASSISTANCE TO INDUSTRIES

State level financial institutions like SICOM Ltd., Maharashtra State Financial Corporation and Central level institutions like LIC of India, GIC of India, IFCI Ltd., SIDBI, etc. provide financial assistance to industries in the State. Banks and other financial institutions like also provide financial loans at attractive interest rates.

3.10   PACKAGE SCHEME OF INCENTIVES

Government of Maharashtra has to see that the industries need to be developed all across the state to avoid unnecessary cauterization leading to unnecessary migration of people, which upsets the local ecology and culture. To ensure the maximum development of regions, the state encourages scattering of industries to the industrially less developed areas. It has launched the 'Package Scheme of Incentives' (PSI) for new/expansion units located in such regions. The scheme was amended from time to time and the State has declared PSI-2013, which will remain in operation from April 2013 to March 2018. Eligible units in all sectors are offered these incentives under PSI-2013. Until December 2016, nearly 2000 crores were distributed as an incentive to eligible MSMEs, large scale industries and mega projects. Table 3.4 below gives Industrial Promotion Subsidy and Other Incentives under Package Scheme of Incentives'.

Table – 3.4 : Industrial Promotion Subsidy and Other Incentives under Package Scheme of Incentives'

Item	Disbursement		
Industrial Promotion subsidy	**2014-15 (in crores)**	**2015-16 (in crores)**	**2016-17 (Dec 17) in crores**
Mega Projects	2,159	2,457	1,580
Large Scale Industries	113	98	57
MSMEs	99	148	148
Large Scale Industries	63	51	47
MSMEs	65	81	101

Source: Directorate of Industries, Government of Maharashtra

The Table 3.4 clearly indicates the state government's preferential disbursement in favour of MSMEs to promote the entrepreneurial activities.

3.11 INDUSTRIAL CLUSTER DEVELOPMENT PROGRAMME

Government of India has pronounced scheme for development of potential clusters for enhancing the productivity and competitiveness of MSMEs. This will help locally available resource management very effective and efficient; and further lead to their sustainability. Government of India has approved 16 cluster projects and 5 projects are approved in principle. The total grant released so for by the government is approx. 100 crores.

Benefits of the Cluster Development Scheme

"Cluster Development approach is considered as an effective approach for inducing competitiveness in the industry by ensuring inter-firm cooperation based on networking and trust. Due to geographical proximity of units and homogeneity/similarity of products, development interventions can be made for a large number of units and simultaneously leading to higher gains at lower cost of implementation. The approach aims at sustainability in long run. It helps overcome disadvantages of economies of scale and weak capital base. It will increase competitiveness by leveraging the advantages of flexible structure and faster decision-making process. The enterprises will be able to meet market challenges. The information will be disseminated quickly. Best practices will be shared (organizational capabilities, skills, technological innovations). The enterprise will be cost effective due to distribution of many common costs and wider public appropriation of benefits is possible.

The clusters achieve success mainly due to the amendment of organizational strategy by the SME units when they face crisis of any kind. The SMEs can get the benefit of each other's strengths and gain collective benefit. They get to develop local network and connect with each other to get the best of collective wisdom. This further propels research, innovation and development. It also promotes healthy competition amongst them. The synergy thus developed is used for positive attitude towards collective work."

3.12 MODIFIED INDUSTRIAL INFRASTRUCTURE UP-GRADATION SCHEME

The sole objective of this scheme is to augment competitiveness of industries by through PPP model. In selected functional clusters government has been providing best quality infrastructure. Central government gives up to 50 percent of the project cost with a ceiling of 50 crores per project. Until December 2016 the central government has disbursed the total grant of approx. 200 crores to five cluster projects, out of which three are successfully completed and two are at different stages of execution.

3.13 SPECIAL ECONOMIC ZONES

Special Economic Zones (SEZ) have been developed by MIDC to provide trouble free environment for exporters, in view of the export prospective of the products defined duty-free. These products are to be considered to be foreign territory for the purpose of trade operations and duties and traffics. Maharashtra has such 74 Special Economic Zone approvals from the government of India. Maharashtra has remained in the first position in India for the highest productivity, economic performance, efficiency, infrastructures and overall competitiveness due to the planned and strategically designed industrial development.

The State has adopted the Special Economic Zone (SEZ) policy with effect from February 2006. As on 31st October 2016, in all 25 SEZs (out of 243 SEZ proposals received) were executed with total investment of 32,255 crores having generated employment of about 3.60 lakh. Totally 72 SEZs were denotified and withdrawn.

The state owned Maharashtra Industrial Development Corporation (MIDC) is supporting Information Technology (IT) and Bio Technology (BT) and have developed IT and BT Parks with the help of Industrial Development Corporation of Maharashtra Limited (CIDCO). Government of Maharashtra has developed as well as revised IT and BT policies.

Up to December 2016, 37 public IT parks with an investment of about 18,000 crores and have been generating about 2.68 lacs employment. To encourage private investments, the state has been encouraging and promoting Private Public Partnership (PPP) projects. To create world class infrastructure for IT industry, 487 private IT parks have been approved, out

of which 170 IT parks are operating worth nearly 4000 crores investments and 5.5 lacs employment. The balanced 317 IT parks with proposed investment of approx 10250 crores are likely to provide about 13.66 lacs employment opportunities.

Two Public BT Parks have been developed in the state at MIDC Jalna and MIDC Hinjewadi (Pune). Six private BT parks are proposed with an investment of about 300 crores. Ten BT–SEZs under public sector are proposed in the State with a proposed investment of about 4500 crores and anticipated employment generation of about 1.64 lacs.

"As of March 2007, totally 87000 MSMEs are working in the Maharashtra state with an investment of nearly 15000 crores and employment of about 11lacs[66]. During the 'Make in India' event organised in Mumbai from 13th to 18th February 2016, totally 3,018 MoUs were signed by the State with proposed investment of 8,04,897 crores & expected employment of about 30.5 lacs. Upto September, 2015, in all 2,43,721 MSME units, with an investment of Rs.56,552 crore generating employment of 29.19 lakh were functioning."

Year wise investment and Employment in MSMEs information is given in Table 3.5 below:

Table – 3.5 : Year wise investment and Employment in MSMEs

Year wise Investment & Employment in MSMEs Year	MSMEs	Investment (Rs.in crore)	Employment (in lakh)
2007-08	10,244	2,281	1.39
2008-09	11,682	3,295	1.71
2009-10	11,896	3,028	1.50
2010-11	14,496	5,563	1.87
2011-12	15,606	4,443	2.07
2012-13	16,136	5,455	2.06
2013-14	19,814	6,358	2.48
2014-15	36,992	7,180	3.50
2015-16	20,220	4,090	1.66

Directorate of Industries, Government of Maharashtra

Year by year working enterprises whether manufacturing or services are increasing and its share in national or state GDP has also shown increasing trend with some fluctuations. Numbers of working enterprises are higher in informal or unregistered sector and it's playing crucial role in employment generation too. But registered enterprises suppressed unregistered sector in output generation. So we can say that unregistered MSME in some states to some extent is labour intensive and registered sector in other way is capital intensive in some states.

"Maharashtra government has rolled out significant incentives for women entrepreneurs, becoming the first Indian state to unveil a dedicated industrial policy for women (2018).Under this policy, first-generation women entrepreneurs who set up micro, small or medium enterprises (MSMEs) in the state will be entitled to a capital subsidy of up to Rs. 1 crore, depending on location of the unit. This is the first time the government has extended a capital grant incentive to an industry segment. The women-run businesses would be offered special concessions for locating their units, and extended lower power tariffs, higher interest subsides, and grants for branding their products, among other incentives. In line with the government's overall industrial policy, the policy for women also aims at giving a push to investments in industrially backward belts."

Amravati, Aurangabad, Konkan, Nagpur, Nashik, and Pune are the main divisions of Maharashtra for better administration. Each division has MIDC zone allotted to promote MSMEs and generate local employment opportunities.

Table – 3.6 : Region wise distribution of MSMEs and large enterprises .as on 31.12.2012

Region-Wise Details of MSMEs and Large Enterprises as on 31.12.2012 (In Nos.)				
	MSME		**Large Enterprises***	
Region	**No of Enterprises**	**Employment in lakhs**	**No of Enterprises**	**Employment in lakhs**
Konkan	39269	6.32	1533	2.92
Nashik	27458	3.15	665	1.52
Pune	92233	10.04	1490	4.07
Aurangabad	18751	1.92	538	1.11
Amravati	14510	1.13	148	0.32
Nagpur	26714	2.56	541	1.31
Total Maharashtra	**243721**	**29.19**	**4915**	**11.25**

Source : Directorate of Industries GOM.

*as on 31.12.2012

3.14 MSME - DEVELOPMENT INSTITUTE

The government of Maharashtra has set up MSME - Development Institutes at Mumbai and Nagpur with a Branch Institute at Aurangabad, to provide support facilities and services to entrepreneurs. The office acts as a link with different financial institutes, industries, promotional agencies, academicians, university colleges and professional associations to provide support of different types to the MSMEs. This is done with a view to promote entrepreneurship. Major activities and services like advocacy, consultancy, research, counselling, skill development, and export procedures through various management development programmes are conducted / provided from time to time to continuously keep the entrepreneurs updated in their areas of work.

BSE SME platform

"Raising capital Finance is more easier with SME BSE (Bombay Stock exchange) "SME exchange" means a trading platform of a recognised stock exchange having nationwide trading terminals permitted by the Board to list the specified securities issued in accordance with rules and includes a stock exchange granted recognition .

No. of companies listed	200
No. of companies suspended	7
No. of companies eligible for trading	194
No. of companies traded	77

BSE Ltd has set up the BSE SME Platform as per the rules and regulations laid down by SEBI. BSE SME Platform offers an entrepreneur and investor friendly environment, which enables the listing of SMEs from the unorganized sector scattered throughout India, into a regulated and organized sector.

Small and medium enterprises (SMEs) have always complained of difficulty in accessing both debt and equity capital. While the government has taken several measures to ease access to credit, giving them easier access to equity is the next step in that process."[67]

"SME Exchanges like AIM (London), Canada (TSXV), Hong Kong (GEM), Japan (Mothers), Korea (KOSDAQ) and US (NASDAQ) were studied in detail to understand their salient features, best practices and their business model. Learning from the OTCEI, the capital market realities, and difficulties faced by SMEs have been taken into account while formulating the BSE SME Exchange in the Indian context.

The listed SMEs will step into the threshold of BSE SME Platform and foray in to the world of finance for further growth and development. BSE SME will assist these SMEs to raise equity capital for their growth and expansion and thus help them blossom into full fledged companies. In due time enable them to migrate into the Main Board of BSE as per the existing rules and regulations."BSE SME will provide immense opportunities to the following market participants. To raise equity capital for growth and expansion of SMEs in a cost effective manner. Investors Opportunities to identify and invest in good companies at an early stage, long term Capital Gain tax benefit and Exit Route.

Table – 3.7 : Tax Benefits. Provided by SBE SME EXCHANGE

Tax Benefits	Shares listed on BSE SME	Unlisted Shares
Long Term Capital Gains Tax	0%	20% after indexation.
Short Term Capital Gains Tax	15%	30%

3.15 CONCLUSION

Globally MSMEs have been playing a significant role in the development of all the countries, developed as well as developing ones. This is evident from their massive contribution with regards to the national GDP, employment generation, industrial output, annual turnover, and global exports. Indian economy has gained ample impetus on account of the ever enlarging contribution of MSMEs. More than 62percent population are working in MSMEs. Government policies have been proactively drafted to promote MSMEs. However, sick units are still a grave problem for India. This is enormous waste of investment which affects the national economy. Survival and sustenance of MSMEs is dependent upon how MSMEs face and take on the fierce global competition. Major reasons as identified earlier are lack of credit facilities, marketing acumen, infrastructural inadequacies and shortage of raw material. It is evident from research in this area that most of the problems of the MSMEs could be mended if finances are available on time to SME sector. In a nutshell Maharashtra government supports SMEs

CHAPTER – 4

CONCEPTUAL FRAMEWORK OF FINANCIAL PERFORMANCE

4.1 FINANCE

Finance is considered as the life blood of businesses, providing businesses the opportunities to grow, providing employment and also support government through the remittance of income taxes. The strategic use of finance, such as loans and investments, is the key to success of every business. Financial trends also define the state of the economy on a global level helping the central banks to plan appropriate monetary policies.

4.2 FINANCIAL MANAGEMENT

"Planning is an inextricable dimension of financial management, the term financial management connotes that funds flows are directed according to some plan." By **James Van Horne**[68]

"Financial management is that activity of management which is concerned with the planning, procuring and controlling of the firm's financial resources." By Deepika &Maya Rani

"Financial Management is the Operational Activity of a business that is responsible for obtaining and effectively utilizing the funds necessary for efficient operation." By Joseph Massie

4.3 SCOPE AND FUNCTIONS OF FINANCIAL MANAGEMENT

The scope of financial management consists of three groups. The primary scope being related to finance and cash, second scope being in the rising of fund and their administration, finally the third focusing on the activities of rising funds, these are part and parcel of total management, Isra Salomon felt that in view of funds utilization third group has wider scope.

"It can be said that all activities done by a finance officer are under the purview of financial management. But the activities of these officers change from firm to firm, it become difficult to say the scope of finance. Financial management plays two main roles, one – participating in funds utilization and controlling productivity, two – Identifying the requirements of funds and selecting the sources for those funds. Liquidity, profitability and management are the functions of financial management.

The fundamental purpose of financial accounting is to provide useful financial information to users of the company that facilitates in decision making.

The income statement reflects the results of the business while balance sheet accounts for the position of business. Together they are compared with each other to see how efficiently a company is using its assets to generate profits. "Most investors and creditors use financial ratios to analyze the companies. There are innumerable ratios that can be combined for analysis purposes."

These ratios become meaningful only when it is compared to the industry benchmark or the acceptable rule of thumb. Otherwise the ratios cannot be of much use to judge whether or not a company is fiscally sound.

Thus, financial analysis is a crucial part of overall economic analysis carried out by various business organizations in around the world. It depicts the financial health of the given company and helps the companies to channelize their financial resources and also helps in managing the funds of the company in an efficient manner. Financial analysis guides the companies in the future course of action and the direction in which any particular company should move on.

4.4 FINANCIAL PERFORMANCE

Performance can be defined as, "The accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed. In a contract, performance is deemed to be the fulfilment of an obligation, in a manner that releases the performer from all liabilities under the contract"[69].

"Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure

of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation."

"Financial Performance is a scientific evaluation of profitability and financial strength of any Business Concern".

Financial Statements are indication of the two significant factors:

i) Profitability

ii) Financial Soundness

Analysis of financial statements, therefore, refers to the close examination and investigation of the information contained in the income statement and the Balance Sheet so as to afford full diagnosis of the profitability and financial health of the business.

Financial performance analysis helps the entity to identify its internal strengths and use the same to tackle the business opportunities from the environment and also it helps to identify the internal weakness of the entity and thereby helps it to manage the external threats.

The important line items of the financial statements are described below. These items are the crux of the analysis. In other words they are the components of the various tools used for the analysis.

1. Shareholders fund

   Shareholders are the owners of the company. They have provided the equity funds for the company and they are the risk bearers of the entity. Shareholders Fund or own funds comprises of share capital and reserves & surpluses. Reserves are retained earnings or accumulated profit of the company from past years. This is also referred to as net worth of the company. Net worth increases in case of profit making company.

2. Reserves and surplus

   It is part of own funds of the company. Reserves can be of two types

   (1) Capital Reserves and

   (2) Revenue reserves.

   There are restrictions on use of capital reserves. They are normally created out of capital profits like share premium, profit on sale of fixed assets etc. They are not utilized for distributing dividend.

   Revenue reserves are also called as free reserves. The profit earned after subtracting all expenses is known as divisible profit, which is partly distributed amongst shareholders in the form of dividend, and residual is retained by the enterprise for unforeseen expenses or development expansion plans for future. These are also called as retained earnings, which are getting accumulated every year as, and when the need occurs, the company can utilize these.

   Both the reserves increase share holders net worth and make the company financially sound.

3. Borrowed funds[70]

   Liability side of the balance sheet has two major components,

   1) Own fund, and

   2) Borrowed fund

   Own funds are the shareholders funds. The other component, one of the important sources of fund is the borrowed funds. Such funds are those the entity has borrowed

from outsiders for a charge against its assets. It includes secured loans and unsecured loans and other liabilities. There are no financial charges on own fund but on borrowed fund, company has to make payment of interest.

4. Current liabilities

Current liabilities are the short term obligations of an enterprise which are payable within a financial year. The major components of current liabilities are

- Bills payable
- Bank overdraft
- Short term loans and advances
- Creditors
- Outstanding expenses.

An abnormal amount of current liability can create short term liquidity crisis for the company. When the entity is unable to pay of its creditors on time, it also affects the credibility of the company.

5. Capital employed

Capital employed is a total of sources of funds to the business enterprises. In other words, capital employed is the sum of share capital, reserves and surpluses and the borrowed funds. It represents the total assets employed by an entity to earn profit.

6. Fixed asset

The right hand side of the balance sheet represents use of fund and left hand side shows source of funds. The fixed assets are one of the important component against which the funds are utilized. It constitutes items like building, plant and machinery, furniture etc. These assets are used in the generation of revenue, and usually more than a year, i.e. long term. This is why depreciation is deducted from the total value of the asset and charged against the same revenue of the same period. Fixed assets are therefore the resources owned by the company and used in earning revenue.

7. Current assets

Current assets are the operational assets of the business. It represents those assets which the company expects to be realized in its ordinary course of operational cycle.

It includes liquid assets like

- Cash in hand
- Inventory
- Debtors
- Bills/trade receivables
- Short term loans and advances.
- Prepaid expenses

These assets are used to meet the short term obligations of the entity. Hence they can be used as a yard stick to measure the short term financial strength of the company.

8. Quick assets

Quick assets are assets that can be converted to cash quickly. They are more liquid than the current assets. Typically, they include cash, accounts receivable, marketable securities, and sometimes (not usually) inventory. "Quick assets are the highly liquid assetsheld by a company, including marketable securities and accounts receivable." Companies use quick assets to calculate certain financial ratios that are used in decision making, including quick ratio. Quick assets also give a glimpse of the immediate liquidity position of the entity.

9. Working capital

In general there are two concepts of working capital:

- Gross working capital
- Net working capital

"Gross working capital is simply the total of the current assets the company own. It represents the investment of the entity in its current assets. This is a theoretical concept. It is not widely used in the analysis of working capital. Net working capital is the difference between the current assets and current liabilities of an entity. A positive net working capital indicates that the company has enough assets to pay off the liabilities and a negative net working capital indicates that the company is facing a liquidity crunch. Net working capital is widely accepted and used in analyzing the financial performance."

10. Revenue from operations

"Revenue is the gross inflow of economic benefits during arising in the course of the ordinary activities of an entity in a particular period." Such inflows result in increases

in equity, other than increases relating to contributions from equity participants. Revenue includes only the gross inflows of economic benefits received and receivable by the entity on its own account. According to Ind AS Transition Facilitation Group, "Amounts collected on behalf of third parties such as sales taxes, goods and services taxes and value added taxes are not economic benefits which flow to the entity and do not result in increases in equity." This is because such receipts are not available for the use in the business.

11. Profit after tax

The ultimate aim of any business enterprise is to earn maximum profit. A firm should earn profit to survive and grow over a long period of time. A business enterprise can be able to discharge its obligations to the segments of the society only through earning of profits. Profit is considered as the measure of overall efficiency of a business. Profitability is the ability of a firm to earn maximum profit from best utilization of its resources. "The net amount earned by a business after all taxation related expenses have been deducted. The profit after tax is often a better assessment of what a business is really earning and hence can use in its operations than its total revenues."

4.5 TOOL OF FINANCIAL PERFORMANCE ANALYSIS

Financial performance analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of balance sheet and profit and loss account. It also helps in short-term and long term forecasting.

The analysis and interpretation of financial statement is used to determine the strengths and weaknesses of the company. The following tools are used for analyzing the financial position of the company:

- Ratio Analysis

- Comparative balance sheet

- Common size balance sheet

- Trend analysis

Ratio Analysis

Fundamental analysis is based on the concepts, analytical tools and various other techniques developed by the experts. It helps in comparing the relative strengths and weaknesses of companies.

Financial Ratio Analysis is a tool that was developed to perform quantitative analysis on numbers found on financial statements. However, they vary across different industries and sectors and comparisons between completely different types of companies are often not valid. In addition, it is important to analyze trends in company ratios instead of solely emphasizing a single period's figures. A ratio is a relative magnitude of two elements. There are many standard ratios used in evaluating the overall financial condition of a corporation or other organization.

"Ratio is any strategic or tactical advantage, and as a verb, means to exploit such an advantage, just as the use of a physical lever gives one an advantage in the physical sense. Ratio is a very popular business term .In the world of finance, Ratio is the use of borrowed money to make an investment and the return on an investment."[3]

Financial ratios fall into several categories. For the purpose of this analysis, the commonly used ratios are grouped into four categories: activity, liquidity, solvency and profitability. Also, for the sake of consistency, the data in the financial statements created for the prior instalments of the Financial Statement Analysis series will be used to illustrate the ratios.

Liquidity Ratios

Liquidity ratios are some of the most widely used ratios, perhaps next to profitability ratios. They are especially important to creditors. These ratios measure a firm's ability to meet its short-term obligations.

The level of liquidity needed varies from industry to industry. Certain industries are more cash-intensive than others. For example, grocery stores will need more cash to buy inventory constantly than software firms, so the liquidity ratios of companies in these two industries are not comparable to each other. It is also important to note a company's trend in liquidity ratios over time.

Current ratio

The current ratio measures a company's current assets against its current liabilities. The current ratio is a measure of the short term liquidity of the company, ie, it shows if the company can pay off its short-term liabilities in an emergency by liquidating its current assets. Current assets are found at the bottom of the balance sheet and include line items such as cash and cash equivalents, accounts receivable and inventory, among others. Current ratio is calculated by the following formula

$$\frac{current\ assets}{current\ liabilities}$$

A low current ratio indicates that a firm may have difficulty in paying their current liabilities in the short run and deserves further investigation. A current ratio under 1.00, for example, means that even if the company liquidates all of its current assets, it would still be unable to cover its current liabilities. A high ratio indicates a high level of liquidity and less chance of a cash squeeze. A high current ratio may also indicate that the company is carrying too much inventory, allowing accounts receivables to balloon with tax payment collection standards or simply holding too much in cash.

Quick ratio

The quick ratio is a liquidity ratio that is more stringent than the current ratio. This ratio compares the cash, short-term marketable securities and accounts receivable to current liabilities. The rationale behind the quick ratio is that certain items, such as prepaid expenses, have already been paid out for future and therefore, cannot be quickly and easily converted back to cash for liquidity purposes. Quick ratio is calculated by using the formula:

$$\frac{Quick\ assets}{Current\ liabilities}$$

Inventory is also excluded from the calculation of quick assets. During times of stress, high inventories across all companies in the industry may make selling inventory difficult. In addition, if company stockpiles are overly specialized or nearly obsolete, they may be worth significantly less to a potential buyer.

Cash to current assets

The ratio represents the proportion of cash held by the company against the current assets. It is calculated as follows:

$$\frac{Cash}{Current\ Assets}$$

Ideally the share of cash in current assets should be less.

Current assets to total assets

It indicates the extent of total funds invested for the purpose of short term liquidity and throws light on the importance of current assets of a firm. It is calculated as

$$\frac{Current\ assets}{Total\ Assets}$$

It should be worthwhile to observe that how much of that portion of total assets is occupied by the current assets, as current assets are essentially involved in forming working capital and also take an active part in increasing liquidity.

Liquid asset to current asset ratio

The ratio describes the relationship between liquid asset and the current asset of the entity. It looks into the share of liquid assets in the current assets of the entity and thereby reflects an overall idea of the impact of stock in the liquidity position of the company. The formula used is

$$\frac{Liquid\ Assets}{Current\ Assets}$$

Working capital analysis

Debtors' turnover ratio

"Receivables turnover ratio can be calculated by dividing the net value of credit sales during a given period by the average accounts receivable during the same period. Average accounts receivable can be calculated by adding the value of accounts receivable at the beginning of the desired period to their value at the end of the period and dividing the sum by two."

The method for calculating receivables turnover ratio can be represented with the following formula:

$$\frac{Net\ credit\ sales}{Average\ debtors}$$

Working capital turnover ratio

Working capital turnover is a ratio which measures how efficiently a company is using its working capital to support a given level of sales. Also referred to as net sales to working capital, it shows the relationship between the funds used to finance a company's operations and the revenues a company generates as a result.

$$\frac{Sales}{Working\ Capital}$$

"A high turnover ratio shows that management is being very efficient in using a company's short-term assets and liabilities for supporting sales, i.e., it is generating a higher dollar amount of sales for every dollar of the working capital used. In contrast, a low ratio may indicate that a business is investing in too many accounts receivable and inventory to support its sales – which could lead to an excessive amount of bad debts or obsolete inventory.

To gauge just how efficient a company is at using its working capital; analysts also compare working capital ratios to those of other companies in the same industry, and look at how the ratio has been changing over time. However, such comparisons are meaningless when working capital turns negative, because the working capital turnover ratio then also turns negative."

Sales to Current assets

The sales to current assets ratio is a financial calculation that can help you determine how efficiently a company is making use of its current assets to generate revenue. Current assets in this case would include the combined total of cash, marketable securities, receivables, inventory, and any prepaid expenses.

$$\frac{Sales}{Current\ assets}$$

The sales to current asset ratio will give you the most meaningful measure of liquidity when it's used to analyze businesses that hold a significant amount of inventory. Because this ratio value can vary widely, the comparison of net sales amounts with current assets is best used to

spot trends over a number of accounting periods for the same company, or to compare multiple companies within the same industry.

In general terms, when the value of the sales to current asset ratio is high, a company is supporting its business income with very few assets.

Credit Strength Ratio

Credit strength ratio indicates reliance on the equity for payment of debt. It is one of the measures of the solvency of a firm. Generally, as a rule of thumb, the ratio should not exceed 60 percent; higher percentages mean significant pressure on future cash flows.

$$\frac{current\ liabilities}{Networth} \times 100$$

Solvency Ratios

Solvency ratios measure a company's ability to meet its longer-term obligations. Analysis of solvency ratios provides insight on a company's capital structure as well as the level of financial leverage a firm is using.

Some solvency ratios allow investors to see whether a firm has adequate cash flows to consistently pay interest payments and other fixed charges. If a company does not have enough cash flows, the firm is most likely overburdened with debt and bondholders may force the company into default.

Fixed Assets Ratio

Fixed Assets ratio is a type of solvency ratio (long-term solvency) which is found by dividing total fixed assets (net) of a company with its long-term funds. It shows the amount of fixed assets being financed by each unit of long-term funds.

It helps to determine the capacity of a company to discharge its obligations towards long-term lenders indicating its financial strength and ensuring its long-term survival.

$$\frac{Net\ Fixed\ Assets}{Long\ Term\ Funds}$$

Net fixed assets: (Total of fixed assets – Total depreciation till date) + Trade Investments including shares in subsidiaries.

Long-term funds: Share capital + Reserves + Long-term loans.

Debt-to-assets ratio

The debt-to-assets ratio is the most basic solvency ratio, measuring the percentage of a company's total assets that is financed by debt. The ratio is calculated by dividing total liabilities by total assets. A high number means the firm is using a larger amount of financial leverage, which increases its financial risk in the form of fixed interest payments.

Degree of financial leverage

Degree of Financial Leverage (DFL) is a ratio that measures the sensitivity of a company's earnings per share (EPS) to fluctuations in its operating income, as a result of changes in its capital structure. Degree of Financial Leverage (DFL) measures the percentage change in EPS for a unit change in earnings before interest and taxes (EBIT), and can be mathematically represented as follows:

$$\frac{EBIT}{EBIT - Interest}$$

The higher the DFL, the more volatile earnings per share (EPS) will be. Since interest is a fixed expense, leverage magnifies returns and EPS, which is good when operating income is rising, but can be a problem during tough economic times when operating income is under pressure.

Profitability Ratios

Profitability ratios are arguably the most widely used ratios in investment analysis. These ratios include the ubiquitous "margin" ratios, such as gross, operating and net profit margins. These ratios measure the firm's ability to earn an adequate return. When analyzing a company's margins, it is always prudent to compare them against those of the industry and its close competitors.

Margins will vary among industries. Companies operating in industries where products are mostly "commodities" (products easily replicated by other firms) will typically have low margins. Industries that offer unique products with high barriers to entry generally have high margins. In addition, companies may hold key competitive advantages leading to increased margins.

Net profit margin

Net profit margin compares a company's net income to its net revenue. This ratio is calculated by dividing net income, or a company's bottom line, by net revenue. It measures a firm's ability to translate sales into earnings for shareholders. Once again, investors should look for companies with strong and consistent net profit margins.

$$\frac{Net\ Profit}{Sales} \times 100$$

In our example, the net profit margin of 8.3% suggests that for every $1 of revenue generated by the firm, $0.083 is created for the shareholders.

Return on asset and Return on Equity

Two other profitability ratios are also widely used—return on assets (ROA) and return on equity (ROE).

Return on assets is calculated as net income divided by total assets. It is a measure of how efficiently a firm utilizes its assets. A high ratio means that the company is able to efficiently generate earnings using its assets. As a variation, some analysts like to calculate return on assets from pre tax and pre-interest earnings using Earnings before Interest and Tax divided by total assets.

While return on assets measures net income, which is return to equity holders, against total assets, which can be financed by debt and equity, return on equity measures net income less preferred dividends against total stockholder's equity. This ratio measures the level of income attributed to shareholders against the investment that shareholders put into the firm. It takes into account the amount of debt, or financial leverage, a firm uses. Financial leverage magnifies the impact of earnings on Return on equity in both good and bad years. If there are large discrepancies between the return on assets and return on equity, the firm may be incorporating a large amount of debt. In that case, it is prudent to closely examine the liquidity and solvency ratios.

Return on investment (ROI)

When a firm invests money in a business, it naturally expects adequate return on its investment. ROI measures the overall profitability. It establishes the relationship between profit / return and investment. It is also called accounting rate of return.

$$ROI = \frac{Profit\ before\ interest\ and\ tax}{Capital\ employed} \times 100$$

Return on Net worth

"Return on Net worth is a ratio developed from the perspective of the investor and not the company. By looking at this, the investor sees if entire net profit was passed on to him, how much return he would be getting. It explains the efficiency of the shareholders' capital to generate profit."

$$\frac{Net\ Income}{Shareholders\ equity}$$

"A high return on net worth percentage is indicative of the prudent use of shareholders' money while a low percentage indicates less efficient deployment of equity resources.

Return on net worth is considered as a vote of the efficiency of a company's management with an increasing percentage indicating higher efficiency in generating profit on every dollar invested."[71]

Capital Structure Ratios

Debt-to-equity ratio

"The debt-to-equity ratio measures the amount of debt capital a firm uses compared to the amount of equity capital it uses. A ratio of 1.00 x indicates that the firm uses the same amount of debt as equity and means that creditors have claim to all assets, leaving nothing for shareholders in the event of a theoretical liquidation.

For our example, total debt used in the numerator includes short- and long-term interest-bearing debt. This ratio can also be calculated using only long-term debt in the numerator.

Proprietary ratio

The proprietary ratio (also known as the equity ratio) is the proportion of shareholders' equity total assets, and as such provides a rough estimate of the amount of capitalization currently used to support a business. If the ratio is high, this indicates that a company has a sufficient amount of equity to support the functions of the business, and probably has room in its financial structure to take on additional debt, if necessary. Conversely, a low ratio indicates that a business may be making use of too much debt or trade payables, rather than equity, to support operations (which may place the company at risk of bankruptcy).

Thus, the equity ratio is a general indicator of financial stability. It should be used in conjunction with the net profit ratio and an examination of the statement of cash flows to gain a better overview of the financial circumstances of a business. These additional measures reveal the ability of a business to earn a profit and generate cash flows, respectively. To calculate the proprietary ratio, divide total shareholders' equity by total assets. The results will be more representative of the company's true situation if you exclude goodwill and intangible assets. from the denominator.

The more restrictive version of the formula is:

$$\frac{Shareholders' equity}{Total\ tangible\ assets}$$

Total Debt to asset ratio

Total debt to assets ratio measures the relationship between the long term borrowed funds and the total assets. It describes that portion of total assets that are financed through total long term borrowed funds.

$$\frac{Total\ long\ term\ borrowed\ funds}{Total\ assets}$$

Fixed asset utilization index

In an enterprise, fixed asset must be employed in the same quantum of sales. Fixed asset Index assist in understanding the efficiency of a business in optimum utilization of fixed assets. "One of the most important tools employed to evaluate the effectiveness of the utilization of fixed assets is assets index.[72] Fixed asset turnover means the number of times an asset flows through a firm's operations into sales. The turnover of fixed assets investment is defined as the relationship between the volume of business done and the amount of capital tied-up in fixed property investments"[73]. In order to analyse the utilization of fixed assets, the utilization index for the fixed assets has been worked out as under

$$UI_{FA} = \frac{S_t}{S_{t-1}} \times \frac{FA_{t-1}}{FA_t}$$

Where UI_{FA} – Utilization Index (Fixed Assets)

                 S_t – Sales revenue at period 't'

                 S_{t-1} – Sales revenue at (t−1) period

                 FA_t – Fixed assets at period 't'

                 FA_{t-1} – Fixed assets at (t−1) period

A value of $UI_{fa} > 1$ indicates in the matter of utilization of fixed assets of the company. The higher the value of the index, the greater is the degree of efficiency in this regard and vice-versa.

4.6 SPRINGATE MODEL

"Springate continued Altman studies and the use of audit analytics for selecting 4appropriate financial ratios, which was included working capital to total assets, profit before interest and taxes to total assets, profit before tax to current debt, sale to total assets among the 19 ratio, which had the best ratio to identify healthy and bankrupt companies and after its tests, provided a model in 40 companies, which achieved to 92.5 percent correct predictions.

For most of the bankrupt companies models predicted bankruptcy even four years before the actual bankruptcy occurring. There are some variations in accuracy of different models. The model that shows the best results when predicting the bankruptcy is Springate."[74]

4.7 STATISTICAL TOOLS

4.7.1 Correlation

According to L. R. Connor "If two or more quantities vary in sympathy so that movements in the one tend to be accompanied by corresponding movements in the others, then they are said to be correlated". According to W. L. King "Correlation means that between two series or groups of data, there exists some casual connection". The term correlation indicates the relationship between two such variables. It establishes a kind of relationship, if the value of one variable change it leads to change in the value of another variable. The correlation indicates that the two variable move together."

4.7.2 Regression Analysis

"Regression analysis is the process of constructing a mathematical model or function that can be used to predict or determine one variable by other variables. The Simple Linear Regression or bi-variate regression involve two variables in which one variable is predicted by another variable. In simple linear regression, the variable to be predicted is called the dependent variable and is designated as y. The predictor is called the independent variable, or explanatory variable, and is designated as x and in this method only a straight-line relationship between two variables is examined. The first step in determining the equation of the regression line that passes through the sample data is-to establish the equation form. In regression analysis, researchers use the slope-intercept equation of a line with deterministic models."[75] Deterministic models are mathematical models that produce an „exact" output for a given input. A deterministic regression model is: $y = \alpha + \beta x$ In a deterministic model, all points are assumed to be on the line and in all cases is zero. Virtually all regression analysis of business data involve sample data, not population data. As a result α and β are unattainable

and must be estimated by using the sample statistics, a and b. Hence, the equation of the regression line containing the sample y intercepts a and the sample slope b.

"Regression Equation is: $y = a + bx$ Where a = the sample intercept and b = the sample slope A widely used measure fit for regression models is the coefficient of determination, or r^2. The coefficient of determination is the proportion of variability of the dependent variables (y) accounted for or explained by the independent variable (x). The coefficient of determination ranges from 0 to 1. An r^2 of zero means that the predictor accounts for none of the variability of the dependent variables and that there is no regression prediction of y by x. An r^2 of 1 means perfect prediction of y by x and that 100% of the variability of y is accounted for by x. Of course, most r^2 values are between the extremes. Simple regression provides only one predictor and only one regression coefficients to test."[76]

4.8   CONCLUSION

Ratio analysis is a form of fundamental analysis that links together the three financial statements commonly produced by corporations. Ratios provide useful figures that are comparable across industries and sectors. Using financial ratios, investors can develop a feel for a company's attractiveness based on its competitive position, financial strength and profitability. Statistical tests are used to prove the authenticity of financial analysis.

CHAPTER – 5

PROFILE OF SELECTED SMALL AND MEDIUM ENTERPRISES

5.1 MANUFACTURING SECTOR

5.1.1 Bajaj Healthcare Limited

Company was incorporated as Bajaj Healthcare Private Limited on July 15, 1993 under the Companies Act, 1956, with the Registrar of Companies, Mumbai bearing Registration Number - 072892.The status of the Company was changed to a public limited company and the name of the Company was changed to Bajaj Healthcare Limited by a special resolution passed on March 15, 2005.

"Bajaj Healthcare Limited is a pharmaceutical company with manufacturing and marketing capabilities in Active Pharmaceutical Ingredients (APIs), Intermediates and Finished Dosage Formulations (FDFs) with focus on Vitamins, Amino Acids, Anti-Convulsants and Finished Dosage Forms (FDFs) catering to various therapeutic segments."

"Company began its operations in the year 1993 with an API manufacturing unit in Tarapur, near Mumbai. The company have expanded their scale and scope of operations and currently they operate five (5) manufacturing units for manufacture of APIs, Intermediates and Formulations. As part of this expansion, in the year 2006, they acquired a 46,000 sq. mtrs. plant in Savli, for setting up one of our biggest API and Intermediate manufacturing units. In the year 2008, with a view to enter into manufacturing of FDFs, they acquired a 3,000 sq. mtrs. Keeping in momentum of the expansion, in the year 2013, they set-up yet another API and Intermediate manufacturing unit at Panoli, Ankleshwar. In the last fiscal, i.e. in F. Y. 14-15, with the growing demand for APIs, we decided to have a separate unit for Intermediate products so that the Savli and Panoli Units could concentrate on manufacture of APIs.

Accordingly, in November 2014 we acquired and set-up an Intermediate Unit in Tarapur MIDC, near Mumbai. Bajaj Healthcare supply their APIs and FDFs both domestically and exporting to various countries in regions like, Europe, USA, Australia, Africa, South America, etc."[77]

Company's products And Services

"Company's present product portfolio consists of various APIs in the therapeutic categories of Neutraceutical (Amino Acids), Vitamins, Anti-Convulsants, and Bactericidal & Bacteriostatic, Diuretic & Vasodilator, and Mineral & Nutritional supplements, Bronchodilater / Anti-asthmatic and Nootropics".

Table – 5.1 : Details of BAJAJ HEALTHCARE LIMITED

Company	BAJAJ HEALTHCARE LIMITED
The CIN No.	U99999MH1993PLC072892
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	15-Jul-1993
Registration Number:	072892
Class of company	Private
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	N- 216, MIDC, Tarapur, Boisar, Dist. Thane – 401 506
Whether listed or not	Listed (BSESME Platform) **Listing Date**: Tuesday, May 10, 2016
Company status	Active
Website	http://www.bajajhealth.com

5.1.2 Filtra Consultant and Engineering Ltd

"Company headquartered in Mumbai was incorporated in the year 2011 and is a player in water treatment industry focusing on providing strategic and technical support to OEMs for Water Treatment Plants, RO plants and user of these plants. Company had initially commenced its business in Mumbai and later on it expanded its cliental base by setting up branches in Pune, Ahmedabad and Nagpur. Company also exports products and provide strategic and technical support to our clients in Malaysia, Dubai and Africa."

"They provides end to end solutions viz. Procurement, supply, helps in installation, training and after sales service to the clients. Company has an internal team to study market requirements. The team is in close contacts with clients, suppliers and collects data from various department viz. Sales, services etc. and build its internal source pertaining to market demand, client requirement and satisfaction, etc.

The team also constantly taps and studies the market scenario to improve its cliental base.

They believe in establishing strong bond with the customers for continued and long – lasting relation. They train their team to execute supply within the scheduled time frame set by our clients and at competitive prices to avoid any delays and wastages of resources.

Company acts as authorized distributors of manufacturers of components used in water Treatment Industry. Major distribution arrangements are cited below:

- Authorized distributor of HM DIGITAL Inc., Korea for providing hand held type Water Testing Instruments.

- Business associates and authorized representatives of Ace Hygiene Products Private Limited (Manufacturer of Alfaa Ultra Violet Water Purifier's, known as Alfaa UV purifiers) to supply Alfaa U V, off the shelf to Water Treatment Plant OEMs to meet their requirements U V Purifiers. Alfaa U V is exported to various countries including European Nations.

- Distributor in Western Region of Aster technologies, a Pune based entity. It has established its brand in Water Treatment OEM industries for its technically advanced

and cost effective flow meters, MAG Flow meters and Aster Rotameter. Aster Technologies hold ISO 9001 certificate and provides instruments with Traceability to CWPRS (Central Water and Power Research Station).

- Distributor in Western Region of initiative Engineering. It manufactures e Dose, e Dose Neo, e Dose Mega, which are established brands of Dosing Pumps and Dazzled brand LED underwater lights."[78]

Table – 5.2 : Details of FILTRA CONSULTANT AND ENGINEERING LTD

Company	FILTRA CONSULTANT AND ENGINEERING LTD
The CIN No.	U41000MH2011PLC217837
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	May 24, 2011
Registration Number:	217837
Class of company	Private
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	1501, Synergy Business Park, Sahakar Wadi, Next to Synthofine Indus. Estate, Off. Aarey Road, Goregaon East, Mumbai – 400063
Whether listed or not	Listed
Company status	Active

5.1.3 Ganga Pharmaceuticals Limited

"Company was originally incorporated on 11th September, 1989, as "Ganga Pharmaceuticals Private Limited" under the provisions of the Companies Act, 1956 with the Registrar of Companies, Maharashtra, Mumbai. Company was converted in to a Public Limited Company and

consequently the name was changed to "Ganga Pharmaceuticals Limited" vide fresh

certificate of incorporation dated 19th September, 1994 issued by the Registrar of Companies, Mumbai.

Company was established as a producer of quality Bulk Ayurvedic Medicines in Mumbai. Apart from manufacturing, the company is also into marketing, distribution of Bulk Ayurvedic Medicines. Under the Management of Late Shri Brijmohan Sharma, the Company had created an exceptional market reputation not only in Mumbai but all over Maharashtra. Initially, the company was manufacturing the following proprietary products:"

1) Ampachan Vati;

2) Khadira Vati;

3) Nirmalaya churna

As on date the company, it has 230(mention the total number of products in all the categories) number of products in its total portfolio."[79] These productscan be divided into two (2) broad categories:

I. Liquid Dosage Form

Oil-based products

II. Solid Dosage Form

A. Powder-based products;

B. Tablets; and

C. Pills.

Table – 5.3 : Details of GANGA PHARMACEUTICALS LIMITED

Company	GANGA PHARMACEUTICALS LIMITED
The CIN No.	U99999MH1989PLC053392
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	19th September, 1994
Registration Number:	**11-53392**
Class of company	Private
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	Kandivali East, Mumbai 400101,Maharashtra
Whether listed or not	Listed
Company status	Active

5.1.4 Valiant Organics Limited

"Company was incorporated as Valiant Organics Private Limited on February 16, 2005 under the Companies Act, 1956 and having its Registered Office in Mumbai, Maharashtra. Subsequently, the status of the Company was changed to a public limited company and the name of the Company was changed to Valiant Organics Limited vide special resolution dated November 26, 2014. A fresh Certificate of Incorporation consequent upon change of name was issued on July 31, 2015 by the Registrar of Companies, Mumbai, Maharashtra.

Valiant Organics Ltd. is a chemical manufacturing company with focus on manufacturing and marketing of different types of chlorophenol which is a chemical which has several applications mainly into agro-chemical industry, pharmaceutical industry, dyes industry, manufacturing of cosmetics and veterinary drugs. They operate a single location manufacturing facility at Sarigam Industrial Estate having an installed capacity of 4,800 metric tonnes per annum. This business originally begun in the year 1984 as a partnership concern in the name and style of Valiant Chemical Corporation and the company was incorporated as a private limited company in 2005 with an object to acquire this partnership

firm and subsequently the business is being run in our company. In 2015, our company was further converted into public limited company."

Currently, the company manufacture Chlorophenols with the following range:

1) Chlorophenol

    a) Mono – chlorophenol

        i) Ortho chlorophenol

        ii) Para chlorophenol

    b) Di – chlorophenol

        i) 2, 4 Di – chlorophenol

        ii) 2, 6 Di – Chlorophenol

Table – 5.4 : Details of VALIANT ORGANICS LIMITED

Company	**VALIANT ORGANICS LIMITED**
The CIN No.	U24230MH2005PLC151348
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	February 16, 2005
Registration Number:	151348
Class of company	Private
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	109, Udyog Kshetra, 1st Floor, Mulund Goregaon Link Road, Mulund (West), Mumbai 400 080.
Whether listed or not	Listed
Company status	Active

5.1.5 Patdiam Jewellery Limited

Company was incorporated in 1999, Patdiam jewellery limited is engaged in the business of designing, manufacturing and marketing of various jewelleries made out of gold, platinum with studded diamond, precious and semi precious stones. They are 100% export oriented unit primarily catering to international markets. They also have a partnership firm M/s Zest Corporation engaged in manufacturing and marketing of studded jewellery products for retail customers. Their products cater to customers across high-end, mid-market and value market segments.

"They have an efficient team of talented designers who are skilled in computer aided design (CAD). Their designers focus on developing new products and design that meet customer's requirements as well as cater to their tastes and specifications. On an average they develop around 200 designs per month. The product range includes rings, earrings, pendants, bracelets, necklaces, etc. which is manufactured using polished diamonds, precious and other semi precious stones which are set in precious metals like gold, platinum and silver."

"The group focuses on high end, medium range and affordable diamond jewellery with talented in-house designers and model makers. They constantly develop new jewellery designs, themes and collections to keep pace with the latest trends; the company strives at all times to provide products that offer individual customers the most exciting designs with superior finish and quality.

Company's promoters Pravin Kakadia, Samir Kakadia, Chhagan Navadia and Mahesh Navadia having rich experience in gems and jewellery industry established Patdiam Jewellery Private Limited in 1999. With the mission and vision of promoters and their contribution of dedicated team of professionals, the company started reaping seeds of success within a short span of time.

They export studded jewellery products to various countries including Spain, Polland, Germany, Holland, Hungary, Scotland, Denmark, Norway, Czech Republic, Slovenia, Czechoslovakia, Belgium, Dubai, Saudi Arabia, Hong Kong, Japan, France, Ireland, etc."

Table – 5.5 : Details of PATDIAM JEWELLERY LIMITED

Company	**PATDIAM JEWELLERY LIMITED**
The CIN No.	U36911MH1999PLC120537
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	June 25, 1999
Registration number:	120537
Class of company	Private
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	Unit No. 102, Tower No. 1, SEEPZ, Andheri (East), Mumbai – 400096, Maharashtra.
Whether listed or not	Listed
Company status	Active

5.2 SERVICE SECTOR

5.2.1 DRA Consultants Private Limited

"Company was incorporated as "DRA Consultants Private Limited" at Nagpur, Maharashtra as a private limited company under the provisions of the Companies Act, vide Certificate of Incorporation dated May 05, 2009 by Registrar of Companies, Maharashtra, Mumbai. The Company was converted into a Public Limited Company

1956

pursuant to Shareholders resolution passed at the Extra Ordinary General Meeting of our Company held on July 28, 2016 and the name of the company was changed to "DRA Consultants Limited" and a Fresh Certificate of Incorporation consequent upon conversion from Private Company to Public Company dated August 24, 2016 was issued by the Registrar of Companies, Maharashtra, Mumbai.

The Company provides services to leading international donor agencies like Asian Development Bank (ADB), World Bank (WB) and many major municipal corporations. The broad services we provide are as follows:

- Public-Partnership (PP)
- Transaction Advisory Services
- Bid Process Management
- Leak Detection and NRW Studies
- Project Management Consultancy
- Surveys
- Feasibility Studies
- Master Plan Report
- Detailed Project Report
- GIS, MIS and Centralized Monitoring System (SCADA)
- Water & Energy Audits
- Industrial Utilities Audits"[80]

Table - 5.6 : Details of DRA Consultants Private Limited

Company	DRA Consultants Private Limited
The CIN No.	U93090MH2009PTC192183
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	May 05, 2009
Registration Number:	192183
Class of company	Private
Company sub category	Indian Non-government company
Company category	company limited by shares
Address	The Pride Hotel, 58 Behind, Wardha Rd, Ingole Nagar, Somalwada, Nagpur, Maharashtra 440005
Whether listed or not	Listed
Company status	Active

5.2.2 Suyog Telematics Limited

"Suyog Telematics Limited is an India-based telecommunication infrastructure provider. The Company provides telecommunication products and services and is engaged in the other machinery and equipment renting business. The Company is engaged primarily in the business of installing and commissioning of poles, towers and optical fiber cable (OFC) systems in India. The Company's services include fiber optic network solution, tower erection service, pole erection service and trading service.

The Company provides infrastructure assets on a shared basis to wireless and other communications service providers. These customers use the space on its telecommunication towers to install communication-related equipment to operate their wireless communications networks. It also offers services to telecom operators in installing telecom infrastructure on job work basis."[81]

Table – 5.7 : Details of SUYOG TELEMATICS LIMITED

Company	SUYOG TELEMATICS LIMITED
The CIN No.	L32109MH1995PLC091107
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	*July 28, 1995*
Registration number:	91107
Class of company	Private
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	1st Floor, Lbs Marg, 41, Suyog Industrial E Vikhroli (west) Mumbai - 400083
Whether listed or not	Listed
Company status	Active

5.2.3 Comfort Commotrade Private Limited

Company was originally incorporated in Mumbai as "Comfort Commotrade Private Limited" on 5th November, 2007 under the Companies Act, 1956 vide certificate of incorporation issued by the Registrar of Companies, Maharashtra, Mumbai. Company was subsequently converted into a public limited company and consequently name was changed to,Comfort Commotrade Limited" vide fresh certificate of incorporation dated 21st May, 2012 issued by the Registrar of Companies, Maharashtra, Mumbai. Company ,currently engaged in the business of commodity broking.

Company is member of Multitrade Commodity Exchange and National Commodity & Derivatives Exchange Limited It offers trading in many commodities such as bullion (gold, silver), energy (crude oil, natural gas), metals, food grains (rice, maize), spices, oil and oil seeds and others.

Table – 5.8 : Details of COMFORT COMMOTRADE PRIVATE LIMITED

Company	COMFORT COMMOTRADE PRIVATE LIMITED
The CIN No.	L51311MH2007PLC175688
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	5th November, 2007
Registration number:	51311
Class of company	Public
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	A-301, Hetal Arch, S. V. Road, Malad (West), Mumbai – 400 064
Whether listed or not	Listed
Company status	Active

5.2.4   Jupiter Infomedia Limited

"This is growth oriented web Infomedia Company with online publications on Business, Encyclopaedia and Yellow pages. Company develops various informative online publications / verticals in house. The company aims to develop an online information library that would provide in-depth information to its visitors on various topics. At present, we have three online publications where a substantial progress has been done. These include an online business directory (B2B Portal operating through the website - www.JimTrade.com), an Encyclopaedia on India (operating through the website - www.IndiaNetzone.com) and an online yellow pages directory (operating through the website - www.jimyellowpages.com). Company intends to be the market leader in each segment we are operating in. At present, JimTrade.com, has already achieved the status of being one of the leading online business directory with nearly 3,00,000 products profiles. IndiaNetzone.com has been consistently developing well researched articles for "everything" related to India and Jimyellowpages.com has been launched with a focus to become the complete Online Yellow pages of India.

JimTrade.com – B2B Portal - Online business directory of India

JimTrade.com, a B2B Portal, is one of India's largest online business directory with more than 3,00,000 product profiles of Indian Manufacturers. JimTrade.com provides the information on product profiles, suppliers directory & trade shows in India. JimTrade facilitates global trade, with a particular focus on the Indian market, by providing information to global buyers and integrated marketing services to suppliers. Its integrated sourcing, marketing and cataloguing tools aim to provide the right information at the right time, and in the right format to its patrons and hence create a network where sellers can promote their businesses online and buyers can carry out fast, free, reliable and comprehensive sourcing online. It allows users to browse suppliers and products information by and across 21 industry categories and thousands of product sub-categories ranging from agriculture to Industrial Supplies. "Company believe JimTrade.com bridges the gap between our users and businesses by helping users find relevant manufacturers of products and services quickly while helping businesses listed in our database to market their products & services. Company also believe that JimTrade.com is particularly relevant to SMEs, who have limited other cost effective options to access and advertise to such a large number of potential buyers. Listing

on JimTrade.com provides manufacturers with exposure to buyers at a time when the users are making a purchase decision. Businesses may choose to pay for a listing to be featured on a priority basis in our search results / listings and also increased listings would result in increased online traffic".

"IndiaNetzone.com – free Encyclopaedia on India IndiaNetzone.com, an encyclopaedia of India, is an informative and descriptive website that provides in-depth information on arts, entertainment, health, reference, sports, society, travel and various other interesting subjects related to India. To achieve this mission, the editorial team of the company does extensive research from numerous sources and makes a complete compilation of facts on various subjects related to India. Our editorial team has already developed nearly 30,000 informative & researched articles. The Forum at IndiaNetzone.com provides a platform to share knowledge, ask questions and interact with people hailing from different walks of life. The newsletter provided by the editorial team presents information on different informative, popular and recent topics from India. It believe that an online forum such as IndiaNetzone.com would attract a good amount of online traffic and hence increase the saleability of the portal to potential advertisers."

JimYellowpages.com – online Yellow-pages of India

Jim Yellow-page is online Yellow-page directory of India which contains 100+ cities and lakhs of business listings. The mission of JimYellowpages is to give listing to each business located in every nook & corner of India. Company believe that an online database such as jimyellowpages.com would attract a good amount of online traffic and hence increase the saleability of the portal to potential advertisers. Comapny may also explore the possibility of paid listings for priority clients in the future."[82]

Table – 5.9 : Details of JUPITER INFOMEDIA LIMITED

Company	JUPITER INFOMEDIA LIMITED
The CIN No.	U74999MH1991PLC062821
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	April 04, 2005
Registration number:	152387
Class of company	Private
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	701, 7th Floor, Kingston, Tejpal Road, Vile Parle (E), Mumbai – 400057, Maharashtra
Whether listed or not	Listed
Company status	Active

5.2.5   Cawasji Behramji Catering Services

"Company was incorporated on April 03, 2009 by Promoters Mr. Alfred Micheal Arambhan and Mrs. Nalini Arambhan with the objective to establish a well-known name in catering & housekeeping services. They are an ISO 9001-2008+ HACCP and ISO 22000:2005 certified Company Maria currently engaged in the business of providing food catering & housekeeping services, both in India and abroad. In context of their services offering in abroad / overseas clients, they provide catering & housekeeping services on vessels travelling to high seas. Besides this, the Company has also forayed into restaurant business wherein they provide multi-cuisine food to consumer through our restaurant.

Present business composition can be categorized into the following divisions:

1. **Offshore catering & housekeeping services:**

They provide food catering & housekeeping services to various Indian and International shipping and oil exploration companies. They operate and manage staff cafeterias, on a contract basis, at the premises of their corporate clients on different locations. The company provides services on locations such as Offshore Barges, Rigs, Diving Vessel, Supply Vessels and Remote Production Platforms.

2. **Onshore catering services:**

They provide food catering services to our corporate clients, banquets, parties & events and gymkhanas. Under this division, they operate and manage services, on a contract basis, at the premises of our clients.

3. **Fine Dining Restaurant:**

They operate a dedicated restaurant under the brand of ―"me so happy" located in Khar (W), Mumbai. Their restaurant under the aforesaid brand name commenced its operations in September, 2014. The eatery restaurant offers a fun-dining experience with our service focusing on providing our consumers with quality social engagement, fun and plays along with quality food and service in modern ambience."

Table – 5.10 : Details of CAWASJI BEHRAMJI CATERING SERVICES

Company	CAWASJI BEHRAMJI CATERING SERVICES
The CIN No.	U55101MH2009PLC191462
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	April 03, 2009
Registration Number:	191462
Class of company	Private
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	201-202, 2 nd Floor, Benston-B Wing, Near Rizvi College, Sherly Rajan Road, Bandra (West), Mumbai – 400050, Maharashtra, India
Whether listed or not	Listed
Company status	Active

5.2.6 MITCON Consultancy & Engineering Services Ltd

"Incorporated in 2010, MITCON Consultancy & Engineering Services Ltd is ISO 9001:2008 certified company engaged in providing consultancy and engineering services. Company provides services to banking, infrastructure and biotechnology sectors. They have provided services to small and medium enterprises (SME), large corporates, banks, financial institutions and various government bodies .Company have classified their services into Consultancy and Engineering Services and Training and Allied services.

Client based includes GSPC Pipavav Power Company Limited, Ajanta Pharma Limited, VRL Logistics Limited, Sterling Biotech Limited, Naine Minerals & Resources Pte. Limited, Kisan Veer Satara Sahakari Sakhar Karkhana Limited, Shri Vile Parle Kelavani Mandal, D. J. Malpani, Giriraj Enterprises, Mahalaxmi TMT Private Limited, Adlabs Entertainment Limited, HPCL Biofuels Limited, PMT Machines Limited, Kalika Steels Alloys Private Limited and Maharashtra State Police Wireless. Company's shareholders include private sector banks, nationalized banks, financial institutions and state government development corporations.

MITCON Consultancy & Engineering Services Ltd. is listed on SME Platform (EMERGE) of National Stock Exchange of India Limited. MITCON's key shareholders include, SIDBI, SICOM, Nationalised Banks & State Development Corporations. Company have headquarter at Pune (India) and have presence across the country through offices at Mumbai, New Delhi, Ahmedabad, Chennai, Bengaluru, Nanded and Nagpur which are equipped with high speed communication network & state of the art infrastructure"

Business profile

"The Company provides solutions to our clients depending on their requirements inter alia including feasibility studies, detailed project reports, techno economic feasibility reports, financial syndication, lender's engineer services, EIA, basic and detailed engineering, bid process management, project management, cluster development, technical/ financial restructuring, energy audits, corporate debt restructuring, due diligence, qualitative and market research, assets/ business valuation and consultation services in wind power project. IT based training courses and skill based training programs are also conducted."[83]

Table – 5.11 : Details of MITCON Consultancy & Engineering Services Ltd

Company	MITCON Consultancy & Engineering Services Ltd
The CIN No.	U74140MH1982PLC026933
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	April 03, 2009
Registration Number:	191462
Class of company	Private
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	1st floor, "Kubera Chambers" Shivajinagar, Pune 411 005, Maharashtra (INDIA)
Whether listed or not	Listed on November 1, 2013
Company status	Active

5.2.7 Creative Peripherals & Distribution Ltd

Incorporated in 1992, Creative Peripherals and Distribution Ltd distribute consumer electronics to retailers and resellers in India. The company distributes IT, imaging, lifestyle, and telecom products.

"They are engaged in providing distribution services of both volume business and value business products. It has partnered with a number of renowned brands for distribution in the country such as Rapoo Technologies Ltd, Lino Manfrotto + Co S.p.a, Transcend Information Inc, ViewSonic International Corporation, Olympus Corporation, Belkin Inc, Zioncom (Hong Kong) Technology Ltd, Apple India Private Ltd, Sennheiser Electronics India Private Ltd, Gopro Cooperatief U.A, TPV Technology India Private Ltd, Printronix, SIEPL India Electronics Private Ltd, Vintron Infronatics Ltd and Samsung India Electronics Private Ltd.

CPDL is a broad based distribution model which is based on multiple products and multiple brand strategy. The focus is to capture a considerable market share in each of the product categories that will help in its offerings to channel partners and also spread its market risks

arising out of fluctuations in the market share of various brands besides helping it to achieve economies of scale".

Table – 5.12: Details of Creative Peripherals & Distribution Ltd

Company	**Creative Peripherals & Distribution Ltd**
The CIN No.	L52392MH2004PLC148754
ROC code	Roc Mumbai
Companies Act	The Companies Act, 2013 and Companies Act, 1956 to the extent applicable.
Incorporation dated	22 September 2004
Registration Number:	148754
Class of company	Private
Company sub category	Indian Non-government company
Company category	Company limited by shares
Address	1st floor, "Kubera Chambers" Shivajinagar, Pune 411 005,Maharashtra (INDIA)
Whether listed or not	Listed on November 1, 2013
Company status	Active

Business Profile

STPI AND DOLLAR BILLING- Company provide STPI Services (Software Technology Parks of India) and Dollar billing facility to the customers having duty exemptions as well as under SEZ zone.

BIT-TECH SERVICE- Repairs and Service arm of the group for chip level repairing and Annual maintenance service.

MERCHANDISING- Creative Peripherals have been the masters in merchandising.

TRAINING- Product training programme from the experts

5.3 FINANCIAL OVERVIEW OF SELECTED SMES OF MAHARASHTRA

➢ SMEs of Manufacturing Sector

5.3.1 Financial sources of selected SMES

5.3.1.1 Shareholders Fund of Selected SMEs

Shareholders Fund or own funds comprises of share capital and reserves & surpluses. Reserves are retained earnings or accumulated profit of the company. Net worth or shareholders fund increases in case of profit making company.

Table - 5.3.1.1 : A)Shareholders Fund of Selected SMEs in Manufacturing Maharashtra

(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff. Variance	% growth
Bajaj Healthcare Ltd	2,82,346	2,88,848	2,78,290	2,98,004	3,73,152	3,04,128	35,149	12%	6%
Filtra consultants & engineers ltd	13,101	23,727	35,528	41,694	80,607	38,931	25,761	66%	44%
Ganga pharmaceuticals ltd	21,285	21,473	25,734	26,034	24,569	23,819	2,295	10%	3%
valiant organic ltd	1,54,473	1,48,891	1,86,416	2,14,024	2,27,526	1,86,266	34,931	19%	8%
Patdiam jewellery ltd	2,23,527	2,31,478	2,40,168	2,48,191	2,53,244	2,39,322	12,085	5%	3%
AVG	1,38,946	1,42,883	1,53,227	1,65,589	1,91,820	**1,58,493**			

Source: -

compiled from annual report of companies.

The above table reveals that Shareholders fund of selected SMEs have increased during the study period .Only Ganga Pharmaceutical Ltd has the least growth rate of 3%.Standard deviation also shows there is aggressive fluctuation of Shareholders fund of selected SMEs.

Bajaj healthcare Ltd. owns the highest share capital followed by Patdiam jewellery Ltd and Valiant organic ltd. The lowest share capital is owned by Filtra consultant & Engineers ltd and Ganga pharmaceuticals ltd.

Table - 5.3.1.1 : B) Shareholders Fund of Selected SMEs in Service Sector in Maharashtra

(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff. Variance	% growth
DRA Consultants Pvt Ltd	33,860	50,987	64,527	76,079	97,126	64,516	21,540	33%	23%
Suyog Telematics ltd	34,700	41,900	56,895	1,06,164	2,29,823	93,896	72,393	77%	46%
Comfort Commotrade ltd	8,300	12,511	23,618	25,980	31,710	20,424	8,695	43%	31%
Jupiter info media ltd	18,299.00	20,148.00	61,464.00	61,669.00	1,07,322.00	53,780	32,796	61%	42%
Cawasji Behramji Catering services Ltd	51,030.10	52,186.12	78,074.02	98,768.55	1,05,489.76	77,110	22,702	29%	16%
Mitcon Consultancy & Engineering Services Ltd	4,65,404	5,60,134	8,31,015	8,60,129	8,93,168	7,21,970	1,74,530	24%	14%
Creative Peripherals and Distribution Limited	59,002	68,039	83,730	90,621	1,02,318	80,742	15,531	19%	12%
AVG	95,799	1,15,129	1,71,332	1,88,487	2,23,851	**1,58,920**			

Source:

- *compiled from annual report of companies.*

Mitcon Consultancy & Engneering ashows the highest growth rate by 24.6%.Above table nd Suyog Telematics Ltd.also shows that shareholders fund of all selected SMEs have reflected the growth.

The percentage increase in the share holder fund observed, DRA consultant ltd 23 percent, Suyog Telematics ltd 45 percent, Comfort Commontrade Ltd 31 percent, Jupitor info Media ltd 42 percent and Cawasji Behramji catering service ltd 16 percent Creative Peripherals and distribution Ltd 12 percent.

Figure 5.3.1.1 : Shareholders Fund of SMEs in Maharashtra
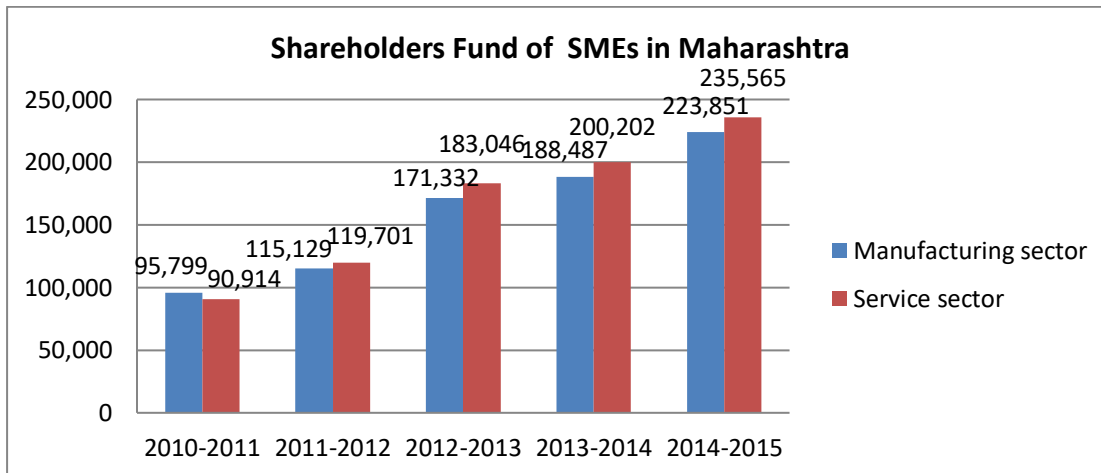
Source – Computed

Shareholders fund of manufacturing sector and service sector SMEs reflects increasing trend. Increasing trend is mainly due to enhance of reserves and surplus of SMEs .It reflects the company has enough assets to cover its liabilities

5.3.1.2 Reserves and Surplus

It is part of own funds of the company. Reserves can be of two types

(1) Capital Reserves and

(2) Revenue reserves.

There are restrictions on use of capital reserves. They are normally created out of capital profits like share premium, profit on sale of fixed assets etc. Revenue reserves are also called as free reserves. They are created out of revenue profits. In other words they are accumulated profits or retained earnings. They can be used for distributing dividend. Both the reserve increase share holders net worth and make the company financially sound. The profit earned after subtracting all expenses is known as divisible profit, which is partly distributed amongst shareholders in the form of dividend, and residual is retained by the enterprise for unforeseen expenses or development expansion plans for future. These are also called as retained earnings, which are getting accumulated every year as, and when the need occurs, the company can utilize these.

Table – 5.3.1.2 :A)   Reserves and surplus of Selected SMEs of Manufacturing sector in
Maharashtra   (Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff. Variance %	% Growth
Bajaj Healthcare ltd	2,62,410	2,68,912	2,58,354	2,78,068	3,53,216	2,84,192	35,149	12%	6%
Filtra consultants & engineers ltd	8,101	18,727	30,528	21,694	53,197	26,449	15,172	57%	46%
Ganga pharmaceuticals ltd	2,035	2,223	2,484	2,784	1,319	2,169	494	23%	-8%
valiant organic ltd	1,50,195	1,45,251	1,82,776	2,10,384	1,91,123	1,75,946	24,772	14%	5%
Patdiam jewellery ltd	2,03,527	2,11,478	2,20,168	2,28,191	2,33,244	2,19,322	10,809	5%	3%
AVG	1,25,254	1,29,318	1,38,862	1,48,224	1,66,420	**1,41,616**			

Source: - compiled from annual report of companies.

Reserves and surpluses are the part of own funds of the business enterprises. The profit is earned after subtracting all expenses that profit is known as divisible profit, which is partly distributed amongst shareholders in the form of dividend, and residual is retained by the enterprise for unforeseen expenses or development expansion plans in future. These are also called as retained earnings, which are getting accumulated every year as, and when the need occurs, the company can utilize this. The reserves and surpluses reflects financial health of the business enterprises ,Filtra Consultant & engineers ltd shows the maximum growth in reserves and surplus while companies shows less than 25% growth and they depict high

degree of volatility. Ganga Pharmaceutical Ltd is the only SME in manufacturing sector shows the negative trend.

Table – 5.3.1.2 : B) Reserves and surplus of Selected SMEs service sector in Maharashtra

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff. Variance %	% Growth
DRA Consultants Pvt Ltd	33,760	50,887	64,427	75,979	97,026	64,416	21,540	33%	24%
Suyog Telematics ltd	13,700	20,900	33,645	41,544	1,45,203	50,998	48,088	94%	60%
Comfort Commotrade ltd	2,900	13,400	1,00,200	1,00,200	1,00,200	63,380	45,217	71%	103%
Jupiter info media ltd	3,799	5,648	26,564	26,769	7,122	13,980	10,412	74%	13%
Cawasji Behramji Catering services Ltd	26,030	47,186	73,074	86,269	92,990	65,110	25,048	38%	29%
Mitcon Consultancy & Engineering Services Ltd	4,60,404	5,55,134	7,10,015	7,39,129	7,72,168	6,47,370	1,19,484	18%	11%
Creative Peripherals and Distribution Limited	44,002	53,039	68,730	75,621	82,318	64,742	14,215	22%	13%
AVG	83,514	1,06,599	1,53,808	1,63,644	1,85,289	**1,38,571**			

Source: - compiled from annual report of companies.

The reserves and surpluses as financial health of the SMEs, DRA Consultant Limited holds average Rs.6.4 crore as reserves, from 2010-2011 till 2014-15 the reserves have increased by 30 percent, In the year 2014-15 Suyog Telematics ltd has Rs.1.45 crore, Comfort Common trade ltd holds 10.2 crore, Jupitor Info Media ltd average Rs.1.39 crore and Cawasji Behramji Catering service ltd nearly Rs.6.51 crore.Mitcon Consultancy & Engineering service ltd holds average 64 crore.It is latest position of reserves and surplus of selected SMEs.

Figure 5.3.1.2 : Reserves and surplus of SMEs in Maharashtra

Reserves and surplus of SMEs in Maharashtra

	Manufacturing sector	Service sector
2010-2011	125,254	83,514
2011-2012	129,318	106,599
2012-2013	138,862	153,808
2013-2014	148,224	163,644
2014-2015	166,420	185,289
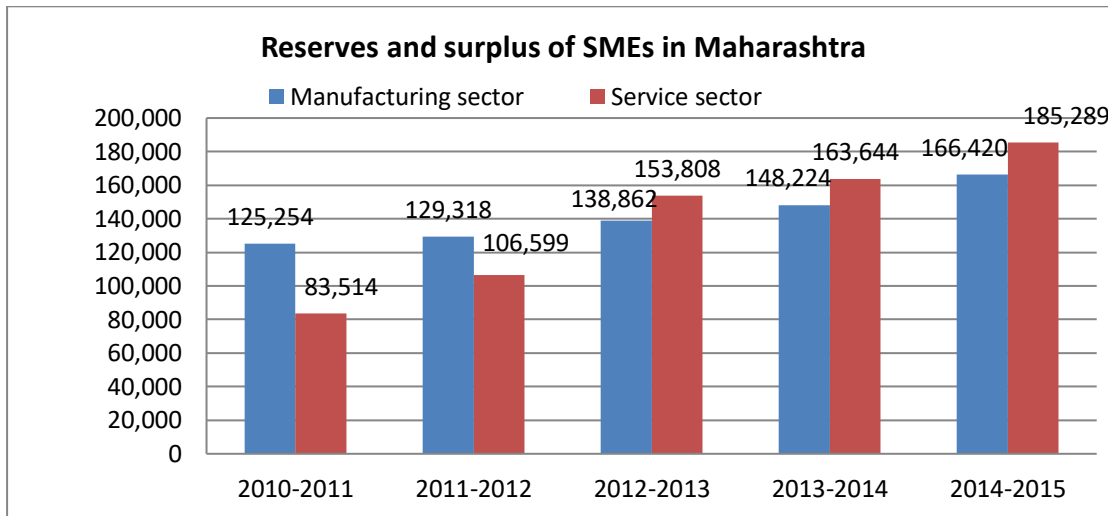
Source – Computed

Reserves help in strengthening the financial position of the enterprise, since it can be used to meet any unforeseen losses that may arise in future. A successful business with a long history of operation can have a large amount of retained earnings, whereas a company with poor profits may have little funds stored in reserves. Average reserves and surplus of SMEs of Manufacturing and service is shows the increasing and positive trend.

5.3.1.3   Borrowed Funds

Source of the fund of any business enterprise comprises of own funds that is share capital, reserves and surpluses. Another source of fund is borrowed funds, it includes secured loans and unsecured loans and other liabilities. There are no financial charges on own fund but on borrowed fund, company has to make payment of interest.

Liability side of the balance sheet has two major components,

1) Own fund and

2) Borrowed fund

Table – 5.3.1.3: A) Borrowed Fund of Selected SMEs of manufacturing sector in Maharashtra

(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff.of variance %	% growth
Bajaj Healthcare Ltd	1,20,145	1,74,268	1,70,799	1,45,446	2,22,179	1,66,567	33,974	20%	13%
Filtra consultants & engineers ltd	0	0	0	0	0	0	0	NA	0%
Ganga pharmaceuticals ltd	4,984	17,194	16,387	14,931	15,327	13,765	4,462	32%	25%
valiant organic ltd	0	0	0	0	0	0	0	NA	NA
Patdiam jewellery ltd	2,093	2,190	2,216	2,053	2,840	2,278	287	13%	6%
AVG	25,444	38,730	37,880	32,486	48,069	36,522			

Source: - compiled from annual report of companies.

Bajaj Healthcare Pvt Ltd has highest average borrowing and also shows the highest variability amongst the selected SMEs whereas in 2010-2011 i.e 120145 thousands. It has the highest borrowed funds. Borrowed funds of Ganga pharmaceutical ltd has increased by 25 percent during these five years, Patadiam Jewellary Ltd. has stable borrowed fund for five years with an average borrowing of 22.78 lakhs.Filtra Consultant and engineers ltd and Valiant organic ltd is debt free, these SME only operates on own fund.

Table – 5.3.1.3 : B) Borrowed Fund of Selected SMEs of Service sector in Maharashtra

(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff.of variance %	% Growth
DRA Consultants Pvt Ltd	4,742	1,944	1,167	1,346	1,634	2,167	1,314	61%	-19%
Suyog Telematics ltd	0	0	0	38,409	82,816	24,245	32,847	135%	NA
Comfort Commotrade ltd	0	48	160	222	215	129	90	70%	NA
Jupiter info media ltd	0	0	0	0	0	0	0	NA	NA
Cawasji Behramji Catering services Ltd	3,701	1,128	3,668	5,927	13,760	5,637	4,336	77%	30%
Mitcon Consultancy & Engineering Services Ltd	32,259	23,993	31,835	22,997	23,994	27,016	4,126	15%	-6%
Creative Peripherals and Distribution Limited	34,143	32,289	29,887	36,628	35,496	33,689	2,388	7%	1%
AVG	10,692	8,486	9,531	15,076	22,559	13,269			

Source: -Compiled from annual report of companies.

Jupitor Info Media ltd shows no borrowed funds. Creative Peripherals and Distribution ltd has highest borrowing amongst the selected SMEs whereas Comfort Commontrade ltd has the lowest borrowed funds. Creative Peripherals and Distribution ltd have to made payment of interest more than remaining selected SMEs has reasonable level of borrowed fund.

Borrowed funds of Cawasji Behramji Catering services ltd have increased by 30 percent from 2010-2011 to 2014-15 i.e Rs 137.6 lakhs. The average borrowed fund appears Rs.56.37 lakhs. Borrowed funds of Suyog Telematics ltd has standard deviation during this 5 years, DRA consultant's borrowed fund shows decrease by 19 percent. DRA consultants have gradually paid back borrowed fund.

Figure 5.3.1.3 : Borrowed Funds of SMEs in Maharashtra
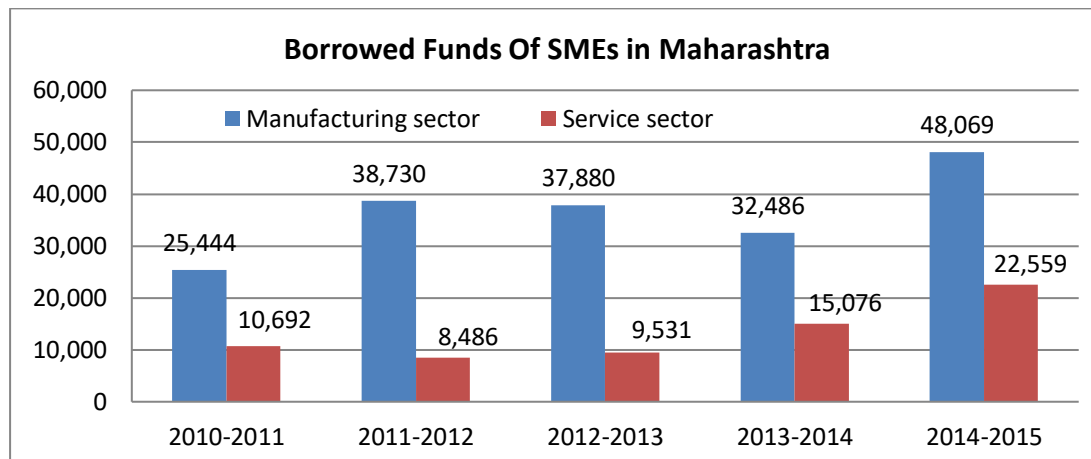
Source – Computed

Borrowed capital in Manufacturing sector is much higher than service sector .Manufacturing SMES are financing its operation increasingly through creditors rather than through employing its own resources, and that it has a relatively higher fixed interest rate charges burden on its assets as manufacturing sector needs more investment in plant and machinery compare to service sector. The range between 254.44 lakhs to 48.06 lakhs of manufacturing sector for the period of five years.The range between 10.69 lakhs to 22.56 lakhs of manufacturing sector for the period of five years.

5.3.2 Application of Resources

5.3.2.1 Current Liabilities

Current liabilities are those obligations of an enterprise which are payable within a financial year. It constituents bills payable, bank overdraft, short term loans and advances, creditors,outstanding expenses. Well managed current liability helps in managing the liquidity and avoids liquidity crunch.

Table – 5.3.2.1 : A)Current Liabilities of Selected SMEs during the study period from 2010-11 to 2014-15 (Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff.of variance %	% growth
Bajaj Healthcare Ltd	6,15,097	7,34,146	8,43,350	9,93,173	8,45,391	8,06,231	1,26,164	16%	7%
Filtra consultants & engineers ltd	41,103	51,165	28,273	54,019	87,251	52,362	19,639	38%	16%
Ganga pharmaceuticals ltd	18,181	5,579	5,674	10,465	12,207	10,421	4,677	45%	-8%
valiant organic ltd	49,005	75,690	1,09,715	87,305	47,631	73,869	23,560	32%	-1%
Patdiam jewellery ltd	2,28,618	1,92,281	2,45,050	2,93,893	2,48,037	2,41,576	32,829	14%	2%
AVG	1,90,401	2,11,772	2,46,412	2,87,771	2,48,103	**2,36,892**			

Source: - Compiled from annual report of companies.

Trade payables have been accumulating in the entities during years of 2013-14 and 2014-15 and the same has lead to a sudden increase in the current liabilities. Patdiam Jewellery shows least growth of current liability i,e 2%.Bajaj Health care has the maximum average current liabilities Rs.8,06,231thousands.Filtra consultant & Engineers ltd shows the growth of 16% which is the highest growth compare to other SME units in manufacturing sector. In case of Ganga Pharmaceuticals ltd current liabilities are decreasing majorly due to repayment of short term borrowings which are a major part of current liabilities of the SMES.

Table – 5.3.2.1 : B)Current Liabilities of Selected SMEs during the study period from 2010-11 to 2014-15 (Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff.of variance %	% Growth
DRA Consultants Pvt Ltd	11,594	52,957	38,648	32,764	35,478	34,288	13,314	39%	25%
Suyog Telematics ltd	76,100	53,500	1,37,804	1,21,367	1,17,753	1,01,305	31,387	31%	9%
Comfort Commotrade ltd	2,900	7,485	6,623	7,133	11,649	7,158	2,782	39%	32%
Jupiter info media ltd	1,864	2,154	1,331	5,870	3,850	3,014	1,658	55%	16%
Cawasji Behramji Catering services Ltd	1,19,071	1,63,618	2,46,760	3,36,163	3,90,702	2,51,263	1,01,812	41%	27%
Mitcon Consultancy & Engineering Services Ltd	89,646	71,501	81,161	72,114	80,268	78,938	6,682	8%	-2%
Creative Peripherals and Distribution Limited	1,63,552	2,18,422	2,64,496	2,68,530	2,25,975	2,28,195	38,010	8%	7%
AVG	66,390	81,377	1,10,975	1,20,563	1,23,668	**1,00,594**			

Source: -Compiled from annual report of companies.

Comfort Common Trades Ltd shows the high degree of volatility in current liabilities. The major part of current liabilities of SMEs are short term borrowings and trade payables .SMEs

prefer short term borrowings as it needs less paper work and no collateral is needed .DRA consultant shows increasing trend of current liabilities with the growth of 25percent.

Comfort commontrade ltd shows the highest growth of current liabilities over the study period of 32%.Mitcon Consultancy & Engineering Services ltd is the only unit shows the decreasing g trend major reason of this is due to decreasing trade payables over the study. This decreasing trend is majorly due to decreasing trend of turnover.

Figure 5.3.2.1 : Current Liabilities of SMEs in Maharashtra
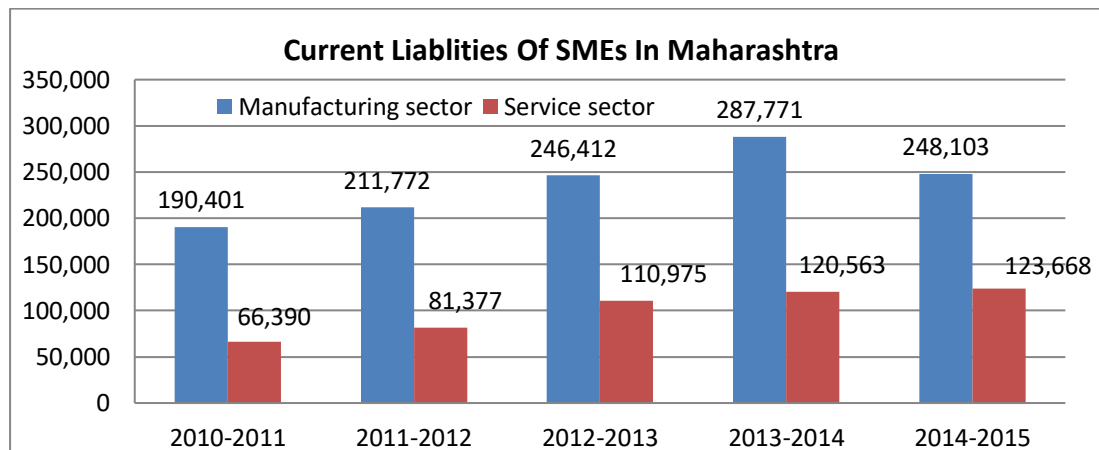
Source – Computed

The average Current liabilities of manufacturing sector SMEs are higher compare to service sector SMEs. The short term funds are more involved in trade payable as manufacturing sector needs more inventory compare to service sector.

5.3.2.2 Total Capital Employed

It is a total of sources of funds to the business enterprises .The ingredients of the capital employed are the share capital, reserves and surpluses and the borrowed funds. The total of these three components represents the capital employed.

The general formula used for computing capital employed is:

Capital Employed = Total Assets - Current Liabilities = Equity + Noncurrent Liabilities

Table – 5.3.2.2 : A)Total capital employed of Selected Manufacturing SMEs in Maharashtra   (Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff.of variance %	%Growth
Bajaj Healthcare Ltd	10,35,152	12,14,826	13,10,003	14,54,187	14,58,491	12,94,532	1,58,898	0.12	7%
Filtra consultants & engineers ltd	54,265	75,148	64,277	99,636	1,70,716	92,808	41,780	0.45	26%
Ganga pharmaceuticals ltd	44,450	44,246	47,795	51,430	52,103	48,005	3,327	0.07	3%
valiant organic ltd	2,62,776	3,93,196	3,74,289	3,96,591	4,07,750	3,66,920	53,175	0.14	9%
Patdiam jewellery ltd	4,54,238	4,25,949	4,87,434	5,44,137	5,04,121	4,83,176	40,707	0.08	2%
AVG	3,70,176	4,30,673	4,56,760	5,09,196	5,18,636	4,57,088			

Source: -Compiled from annual report of companies.

The average capital employed of selected SMEs reflects frequent variations. All the selected SMEs capital employed is showing the rise. The average capital employed by selected five SMEs are Rs.12,94,532 thousands of Bajaj Health care ltd, Rs.92,808 thousands of Filtra consultant & engineers ltd , Rs.48000 crore of Ganga pharmaceuticals ltd., Rs.3,66,920 thousands of Valiant Organic Ltd and Rs4,83,176 thousand by Patadiam Jewellery ltd. All the selected SMEs capital employed is showing the rise.

Table – 5.3.2.2 : B)Total capital employed of Selected Service SMEs in Maharashtra

(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff.of variance %	%Growth
DRA Consultants Pvt Ltd	45,454	1,04,297	1,03,779	1,10,189	1,34,239	99,592	29,269	29%	24%
Suyog Telematics ltd	1,10,800	99,800	1,94,568	2,65,941	4,30,391	2,20,300	1,21,156	55%	31%
Comfort Commotrade ltd	11,200	52,044	1,12,401	1,15,335	1,25,574	83,311	44,352	53%	62%
Jupiter info media ltd	5,963	22,302	62,795	67,539	1,11,172	53,954	36,991	69%	80%
Cawasji Behramji Catering services Ltd	1,53,802	2,16,932	3,28,503	4,40,859	5,09,952	3,30,009	1,33,045	40%	27%
Mitcon Consultancy & Engineering Services Ltd	5,87,309	6,55,629	9,44,012	9,55,239	9,97,430	8,27,924	1,70,879	21%	11%
Creative Peripherals and Distribution Limited	2,56,697	3,18,750	3,78,113	3,95,779	3,63,789	3,42,626	55,871	16%	7%
AVG	1,67,318	2,09,965	3,03,453	3,35,840	3,81,792	2,79,674	84,509		

Source: -Compiled from annual report of companies.

DRA consultant Pvt Ltd has growth of 24 percent over the five years of study period with the average capital employed of 99,592 thousand .Jupitor infomedia ltd shows exorbitant growth of 80% as in the year 2012-13 the unit have issued shares which gave a sudden rise to increase in the share capital .Cawasji Behramji catering services ltd shows the increase in capital employed. All selected SMEs depict high increase of capital employed which show th good financial health of SMEs of service sector.

Figure 5.3.2.2 : Capital Employed of SMEs in Maharashtra
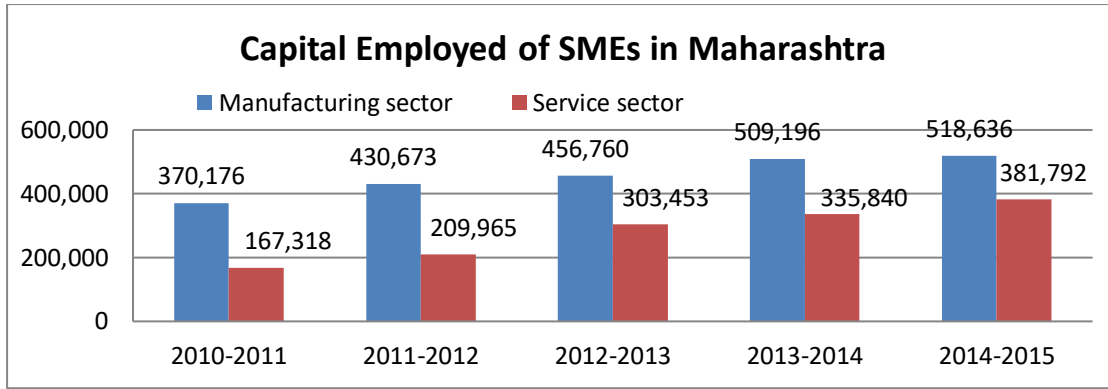
Source – *Computed*

Capital employed is the value of all the assets employed in a business, SMEs in Manufacturing sector has average growth of capital invested in the range of Rs.3,70,176 thousand to Rs. 5,18,636 thousand .Investment in manufacturing is exorbitantly higher than service sector. Service sector SMEs has average capital employed in the range of Rs.1,67,318 thousand to Rs.3,81,792 thousand .This reflects increasing investment in assets.

5.3.2.3 Tangible Fixed Assets

The right hand side of the balance sheet represents use of fund and left hand side shows source of funds. The fixed assets constitutes like building, plant and machinery, furniture.

The period of use of assets, in the generation of revenue, is usually more than a year, i.e. long term. It is therefore obligatory that in order to accurately determine the *Net Income* or profit for a period, depreciation be applied on the total value of the asset and charged against the same revenue of the same period. Fixed Assets as assets whose future economic benefit is probable to flow into the entity, whose cost can be measured reliably.[84]

Table – 5.3.2.3 : A)Fixed Asset of Selected SMEs of manufacturing sector in Maharashtra during the study period from 2010-11 to 2014-15

(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff.of variance %	%Growth
Bajaj Healthcare Ltd	3,45,047	4,60,045	5,41,073	5,58,809	6,53,828.00	5,11,760	1,03,657	20%	14%
Filtra consultants & engineers ltd	1,251	1,158	5,052	4,049	5,058	3,314	1,761	53%	32%
Ganga pharmaceuticals ltd	5,610	5,359	6,618	6,532	6,530	6,130	534	9%	3%
valiant organic ltd	97,651	99,425	1,11,733	1,10,915	1,24,367	1,08,818	9,671	9%	5%
Patdiam jewellery ltd	39,554	40,067	36,756	33,886	27,034	35,459	4,757	13%	-7%
AVG	97,823	1,21,211	1,40,246	1,42,838	1,63,363	1,33,096			

Source: -Compiled from annual report of companies.

The sample companies are not having a remarkable investment in the fixed assets during the initial four years of the study period. Bajaj Healthcare ltd shows the highest standard deviation .Bajaj healthcare ltd have used borrowed funds for investing into fixed asset .Filtra consultant &engineers ltd reflects highest growth fixed assets with the 32% growth. All selected sample SMEs shows the positive growth except Patdiam jewellery ltd.

Table – 5.3.2.3 : B)Fixed Asset of Selected SMEs of Service sector in Maharashtra during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff.of variance %	%Growth
DRA Consultants Pvt Ltd	6,965	9,834	8,246	7,327	7,253	7,925	1,047	13%	1%
Suyog Telematics ltd	11,443	16,033	47,061	1,04,927	2,02,518	76,397	71,336	93%	78%
Comfort Commotrade ltd	2,200	5,474	10,564	6,665	6,853	6,351	2,687	42%	26%
Jupiter info media ltd	657	537	519	1,491	7,323	2,105	2,633	125%	62%
Cawasji Behramji Catering services Ltd	28,755	24,563	25,117	22,898	29,395	26,146	2,509	10%	0%
Mitcon Consultancy & Engineering Services Ltd	1,85,388	1,79,676	2,18,494	2,75,245	2,52,310	2,22,223	37,142	17%	6%
Creative Peripherals and Distribution Limited	5,219	6,520	5,873	4,425	3,047	5,017	1,205	24%	-10%
AVG	34,375	34,662	45,125	60,425	72,671	49,452			

Source: -Compiled from annual report of companies.

It is observed from the data the fixed assets of Suyog telematics ltd and Jupitor Infomedia ltd. shows the highest growth of 78% and 62% respectively for the years from 2010-11 to 2014-15. The net fixed assets of Creative Peripherals and distribution ltd is showing negative trend with negative growth of 10 percent.

Figure 5.3.2.3 : Fixed Assets of SMEs in Maharashtra

Fixed Assets of SMEs in Maharashtra

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Manufacturing sector	97,823	121,211	140,246	142,838	163,363
Service sector	34,375	34,662	45,125	60,425	72,671
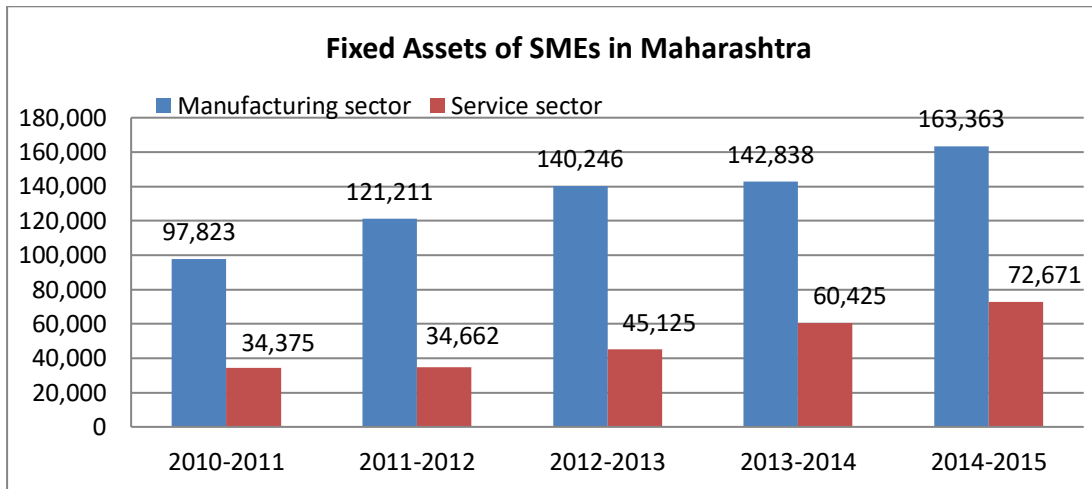
***Source** – Computed*

The average investment in fixed asset shows increasing trending SMEs in Maharashtra. Fixed assets are particularly important to capital intensive industries, such as manufacturing, that require large investments in Plant and machinery. When a business is reporting persistently negative net cash flows for the purchase of fixed assets, this could be a strong indicator that the firm is in growth mode. In service sector, SMEs also shows the positive increasing trend over the period, Manufacturing SMEs have a range of 97823 thousands to 163363 thousands within the study period. In service sector the range is 34375 thousands to 72,671 thousand within the study period.

5.3.2.4 Current Assets

Current assets are also known as operational assets of the business. It represents those assets which the company expects to realise in its ordinary course of operational cycle. It includes liquid assets like cash in hand, inventory, debtors, bills/trade receivables, short term loans and advances.

Table – 5.3.2.4 : A)Current Asset of SMEs Of Manufacturing Sector   in Maharashtra
(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff of variance %	%Growth
Bajaj Healthcare Ltd	5,35,294	6,25,938	7,15,025	8,64,854	7,92,896	7,06,801	1,16,974	17%	8%
Filtra consultants & engineers ltd	52,233	71,617	58,307	93,364	1,37,603	82,625	30,900	37%	21%
Ganga pharmaceuticals ltd	22,090	20,639	20,841	22,572	23,693	21,967	1,131	5%	1%
valiant organic ltd	1,23,533	1,20,027	1,82,569	1,81,447	1,43,257	1,50,167	27,180	18%	3%
Patdiam jewellery ltd	3,87,816	3,59,814	4,25,632	4,85,062	4,52,795	4,22,224	44,663	11%	3%
AVG	2,24,193	2,39,607	2,80,475	3,29,460	3,10,049	**2,76,757**			

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Current assets of Bajaj Healthcare ltd indicates how much <u>cash</u> a company essentially has access to within the next 12 months outside of third-party sources. It is indicative that liquid funds of SMEs its ongoing, day-to-day operations, and the unit has adequate liquidity in SMEs over a period of time.

Table – 5.3.2.4 :B)Current Asset of SMEs of Service Sector   in Maharashtra
(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff of variance %	%Growth
DRA Consultants Pvt Ltd	31,815	93,130	89,301	87,985	71,449	74,736	22,711	30%	18%
Suyog Telematics ltd	88,800	48,500	63,049	61,651	1,60,405	84,481	40,146	48%	13%
Comfort Commotrade ltd	8,800	11,889.00	9,503	19,002	20,516	13,942	4,882	35%	18%
Jupiter info media ltd	3,167	4,131	4,251	3,110	3,044	3,541	534	15%	-1%
Cawasji Behramji Catering services Ltd	1,24,562	1,90,228	3,01,036	4,04,035	4,43,148	2,92,602	1,21,549	42%	29%
Mitcon Consultancy & Engineering Services Ltd	1,59,273.81	2,00,019.62	4,85,791.70	2,29,816.22	3,28,183.28	2,80,617	1,16,756	42%	16%
Creative Peripherals and Distribution Limited	2,39,000	2,97,881	3,57,480	3,75,023	3,43,709	3,22,619	49,011	15%	8%
AVG	93,631	1,20,826	1,87,202	1,68,660	1,95,779	**1,53,220**			

Source: - compiled from annual report of companies.

Current assets of SMEs in service sector majorly includes short term provision, cash and debtors. Current assets of SMEs in service sector reflects increasing trend.DRA Consultant pvt ltd has average investment in current assets is nearly Rs.7.4 crore .Suyog telematics ltd. shows high fluctuations The co-efficient of variance shows huge volatility in the current assets of selected companies. The deviations are mainly because of the share issue in the last year. In case of growth rate, the current asset is showing a steady growth over the period of time in all companies except Jupiter Info media; of which the decrease in Jupitor info media is negligible.

Figure 5.3.2.4 : Current Assets of SMEs in Maharashtra

Current Assets of SMEs in Maharashtra

■ Manufacturing sector ■ Service sector

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Manufacturing sector	224,193	239,607	280,475	329,460	310,049
Service sector	93,631	120,826	187,202	168,660	195,779

Source – Computed

Increases in current assets occur all the time. The cash balance in a company rises and falls based on inflows and outflows of operational cash and financing activities. Manufacturing SMEs have higher investment in operations compare to service sector in SMEs .The major reason is due to higher investment is require in inventories where in service sector doesn't need higher amount of funds investment in stock.

5.3.1.5 Quick Assets

Assets that can be converted to cash quickly. Typically, they include cash, accounts receivable, marketable securities, and sometimes (not usually) inventory. Quick assets are the highly liquid assets held by a company, including marketable securities and accounts receivable. Companies use quick assets to calculate certain financial ratios that are used in decision making, including the quick ratio.

Table – 5.3.2.5 : A)Quick Asset of Selected SMEs of Manufacturing sector in Maharashtra during the study period from2010-11 to 2014-15

(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	coeff.of varian	%growth
Bajaj Healthcare Ltd	3,37,701	4,47,632	5,52,509	6,32,820	6,12,085	5,16,549	1,10,159	21%	13%
Filtra consultants & engineers ltd	40,514	55,065	41,144	57,999	95,183	57,981	19,905	34%	19%
Ganga pharmaceuticals ltd	14,463	10,790	10,688	11,314	13,156	12,082	1,485	12%	-2%
valiant organic ltd	91,185	94,847	1,16,560	1,38,557	1,18,614	1,11,953	17,305	15%	5%
Patdiam jewellery ltd	2,65,566	2,46,482	2,70,258	3,19,025	2,95,356	2,79,337	25,232	9%	2%
AVG	1,49,886	1,70,963	1,98,232	2,31,943	2,26,879	**1,95,581**			

Source: - compiled from annual report of SMEs.

Companies typically keep some portion of their quick assets in the form of cash and marketable securities as a buffer to meet their immediate operating, investing or financing needs. A company that has a low cash balance in its quick assets may satisfy its need for liquidity by tapping into its available lines of credit.

Filtra Consultant& Engineers the highest variance with 34% growth. Generally quick assets are showing stable growth except Ganga Pharmaceutical and. Quick asset shows the similar to current asset shows increasing trend.

Table – 5.3.2.5 : B)Quick Asset of Selected SMEs of Service sector in Maharashtra during the study period from 2010-11 to 2014-15

(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	coeff.of variance %	%growth
DRA Consultants Pvt Ltd	31,815	93,130	89,301	87,985	71,449	74,736	22,711	30%	18%
Suyog Telematics ltd	81,200	41,000	60,023	55,865	1,52,482	78,114	39,344	50%	13%
Comfort Commotrade ltd	8,800	11,889	9,503	19,002	20,516	13,942	4,882	35%	18%
Jupiter info media ltd	3,167	4,131	4,251	3,110	3,044	3,541	534	15%	-1%
Cawasji Behramji Catering services Ltd	1,23,756	1,82,088	2,67,363	3,62,667	3,94,309	2,66,037	1,03,038	39%	26%
Mitcon Consultancy & Engineering Services Ltd	1,56,369	1,96,639	4,82,141	2,27,823	3,27,671	2,78,129	1,16,681	42%	16%
Creative Peripherals and Distribution Limited	1,26,301	1,25,215	2,03,363	2,03,907	2,14,174	1,74,592	40,060	23%	11%
AVG	75,916	93,442	1,59,421	1,37,194	1,69,092	**1,27,013**			

Source: - compiled from annual report of companies.

The average investment in liquid asset in service sector has increased over the years. The main reason of increasing the investments in liquid assets is due to increasing debtors over the period of study. In a way debtors have increased due to increase in turnover.

Only in case of Jupitor info media ltd. quick assets shows decreasing trend as in a way turnover of the same period is also showing the downturn. This can be major reason of showing reduction in investment in liquid assets.

Figure 5.3.2.5 : Quick Assets of SMEs in Maharashtra
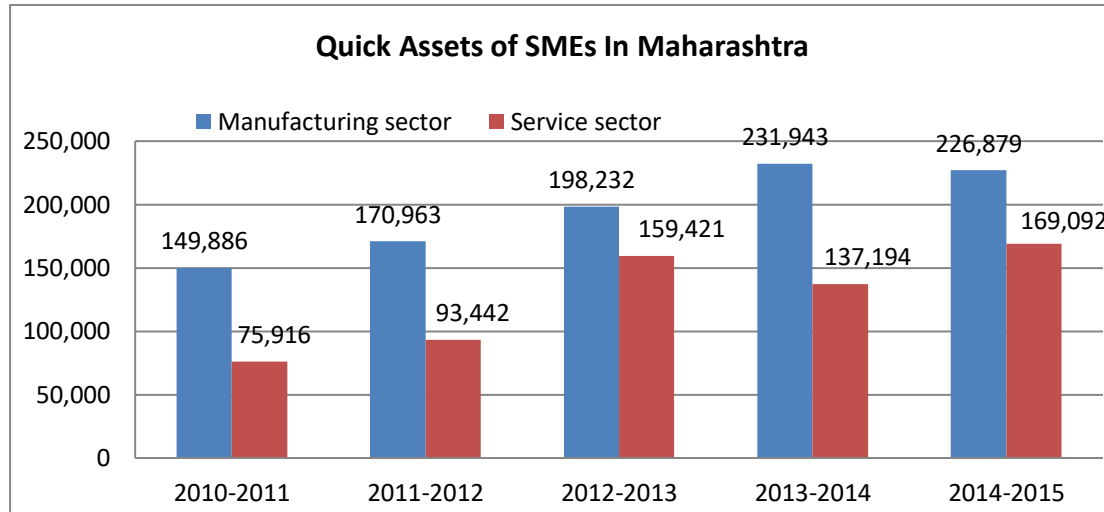
Investment in liquid funds of manufacturing sector selected SMEs are higher than the service sector SMEs in Maharashtra. Quick assets of SMEs reflects that SMEs have strong ability to satisfy its immediate bills and obligations that are due within a one-year period.

5.3.2.6 Working capital

Working capital is that part of the total assets of the business that change from one form to another form in the ordinary course of business operations. But, there is no unanimity with the interpretation of working capital. There is a lot of difference of opinions among accountants, financial experts, entrepreneurs and economists. Therefore, it is essential to understand the different concepts of working capital, important among them are: 1. Traditional or balance sheet concept 2. Operating cycle concept According to the traditional or balance sheet concept, working capital depicts the position of the firm at certain point of time. It is calculated on the basis of the balance sheet prepared at a specific date[85]. The working capital management of SMEs. Excess of current assets over current liabilities are net current assets or working capital. The current assets comprises of stock, bills receivables, cash and bank balance, debtors etc. whereas current liabilities comprises of creditors, bills payable, bank overdrafts etc

Table - 5.3.2.6 : A) Working capital of Selected SMEs of Manufacturing sector in Maharashtra   (Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	coeff.of variance %	%growth
Bajaj Healthcare Ltd	79,803	1,08,208	1,28,325	1,28,319	52,495	99,430	29,444	-30%	-8%
Filtra consultants & engineers ltd	11,130	20,452	30,034	39,344	50,352	30,262	13,773	46%	35%
Ganga pharmaceuticals ltd	3,909	15,060	15,167	12,107	11,487	11,546	4,101	36%	24%
valiant organic ltd	74,528	44,337	72,854	94,142	95,626	76,297	18,593	24%	5%
Patdiam jewellery ltd	1,59,198	1,67,533	1,80,582	1,91,169	2,04,758	1,80,648	16,273	9%	5%
AVG	33,792	27,835	34,062	41,689	61,946	39,865			

Source: - compiled from annual report of companies.

Working capital of selected SMEs shows very high fluctuation. The standard deviation and co-efficient of variation indicates that there was a lack of uniformity and variation in working capital.

It is also seen from Table that over the period of 5 years from 2010-11 to 2014-15, the growth rate of working capital has increased in the entire sample companies except Bajaj health care ltd. Filtra consultant & engineers ltd has the highest growth of 35 percent .Ganga pharmaceutical ltd. has reflected the upward trend of working capital over a study period with the growth of 24%.Patdiam jewellery ltd. and Valiant organic ltd. shows the growth of 5%.

Table - 5.3.2.6 : B)Working capital of Selected SMEs of Service sector in Maharashtra   (Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	%growth
DRA Consultants Pvt Ltd	20,221	40,173	50,653	55,221	35,971	40,448	12,261	12%
Suyog Telematics ltd	12,700	5,000	74,755	59,716	42,652	16,824	44,147	27%
Comfort Commotrade ltd	5,900	34,404	2,880	11,869	8,867	12,784	11,217	8%
Jupiter info media ltd	1,303	1,977	2,920	2,760	806	527	2,050	-191%
Cawasji Behramji Catering services Ltd	5,492	26,610	54,275	67,872	52,446	41,339	22,346	57%
Mitcon Consultancy & Engineering Services Ltd	2,38,453	3,32,726	6,02,536	5,36,928	3,90,300	4,20,189	1,33,003	10%
Creative Peripherals and Distribution Limited	75,448	79,459	92,984	1,06,493	1,17,734	94,424	15,970	9%
AVG	51,360	72,907	1,04,499	1,02,272	92,452	84,698		

Source: - compiled from annual report of companies.

Working capital increases by 12 percent in case of DRA Consultant PVT LTD with average working capital of Rs.40,448 thousands. Suyog telematics ltd.has in 2010-2011 has working capital of Rs. 12700 thousand ,in 2011-12 has negative working capital till 2013-14 as current liabilities have increased due to short term borrowed fund. SMEs have a common tendency of taking short term borrowings and also it is given back in the year 2014-15.mitcon consultancy & Engineers service ltd have highest average working capital of Rs.4,20,189 the major component of working capital is cash and debtors.

5.3.3 Revenue Analysis

5.3.3.1 Revenue from Operations

Revenue is the gross inflow of economic benefits during the period arising in the course of the ordinary activities of an entity. Such inflows result in increases in equity, other than increases relating to contributions from equity participants. Revenue includes only the gross inflows of economic benefits received and receivable by the entity on its own account. Amounts collected on behalf of third parties such as sales taxes, goods and services taxes and value added taxes are not economic benefits which flow to the entity and do not result in increases in equity.[86]

Table - 5.3.3.1 : A)Revenue from Operations of Selected SMEs of Manufacturing sector in Maharashtra   (Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff of variance%	% Growth
Bajaj Healthcare Ltd	11,98,605	14,15,005	17,07,786	20,49,067	21,83,017	17,10,696	3,70,745	22%	13%
Filtra consultants & engineers ltd	88,487	2,70,569	2,45,346	2,75,524	3,75,835	2,51,152	92,747	37%	34%
Ganga pharmaceuticals ltd	18,601	19,454	23,100	26,621	26,947	22,945	3,482	15%	8%
Valiant organic ltd	3,26,767	3,39,945	4,25,098	5,90,379	5,20,994	4,40,637	1,02,202	23%	10%
Patdiam jewellery ltd	4,81,041	2,82,837	3,14,529	3,66,260	5,36,497	3,96,233	97,261	25%	2%
AVG	422700	465562	543172	661570	728658	**564332**			

Source: - compiled from annual report of companies.

Profit is the soul of the business without which it is lifeless, for that profitability is a good device which represents the earning of a business firm. "An analysis of the revenue from operations reveals as to how the position of profit stands as result of total transactions made during the year."[87]

Bajaj Healthcare ltd reflects high fluctuations and upward trend with a growth of 13 percent. Filtra consultant & engineers ltd also have positive trend with the compounding growth of 34 percent. Ganga pharmaceuticals ltd has relatively stable growth of revenue from operation with the average of Rs.3, 482 .Valiant organic ltd and Patdiam jewellery ltd have annual growth of more than 20 percent.

Table - 5.3.3.1 : B)Revenue from Operations of Selected SMEs of Service sector in Maharashtra   (Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff of variance%	% Growth
DRA Consultants Pvt Ltd	78,860	1,21,105	99,396	99,384	1,63,108	1,12,371	28,672	26%	16%
Suyog Telematics ltd	55,000	89,500	88,879	1,17,157	2,17,121	1,13,531	55,417	49%	32%
Comfort Commotrade ltd	12,200	25,501	14,451	22,281	32,268	21,340	7,330	34%	21%
Jupiter info media ltd	7,855	6,394	6,110	5,471	4,050	5,976	1,240	21%	-12%
Cawasji Behramji Catering services Ltd	3,74,923	4,21,567	6,23,957	7,26,841	6,30,719	5,55,601	1,34,349	24%	11%
Mitcon Consultancy & Engineering Services Ltd	5,43,778	4,66,657	4,04,907	4,32,388	4,49,738	4,59,494	46,829	10%	-4%
Creative Peripherals and Distribution Limited	12,40,822	12,65,269	13,96,795	18,44,781	19,86,230	15,46,779	3,08,958	20%	10%
AVG	3,30,491	3,42,285	3,76,356	4,64,043	4,97,605	**4,02,156**			

Source: - compiled from annual report of companies.

Revenue from operations shows a drastic change in the last two years of the period of study. It is evident from the standard deviation figures that the sample companies are not earning uniformly. Jupitor info media ltd and Mitcon Consultancy & Engineering ltd shows negative trend during the study period.

5.3.3.2 Profit after tax

The net amount earned by a business after all taxation related expenses have been deducted. The profit after tax is often a better assessment of what a business is really earning and hence can use in its operations than its total revenues.[88]

Table - 5.3.3.2 : A)Profit after tax of Selected SMEs of Manufacturing sector in Maharashtra   (Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff. Of variance	% Growth
Bajaj Healthcare Ltd	44,730.00	1,06,502.00	89,441.00	1,19,714.00	75,149.00	87,107	26,014	30%	11%
Filtra consultants & engineers ltd	8,101	11,788	11,802	5,936	13,531	10,232	2,785	27%	11%
Ganga pharmaceuticals ltd	27	188	262	299	335	222	109	49%	65%
valiant organic ltd	39,178	40,258	55,413	72,729	1,03,064	62,128	23,825	38%	21%
Patdiam jewellery ltd	9,590	7,950	8,690	7,951	5,205	7,877	1,466	19%	-12%
AVG	20,325	33,337	33,122	41,326	39,457	**33,513**			

Sources- compiled from annual report of companies.

Bajaj Healthcare ltd has highest fluctuations with high standard deviation 26,014 and high coefficient of variance of 30% .Net profit after tax of Filtra consultant & engineers ltd. reflects increasing trend with compounding annual growth rate of 11%.Ganga pharmaceutical ltd is the least profitable than compare of other selected sample SMEs. Ganga Pharmaceuticals Ltd. has the highest growth of profit after tax of 65% as turnover have increased over a study period .Patdiam jewellery ltd. reflects negative trend of profit after tax .

Table - 5.3 .3.2 : B)Profit after tax of Selected SMEs of Service sector in Maharashtra
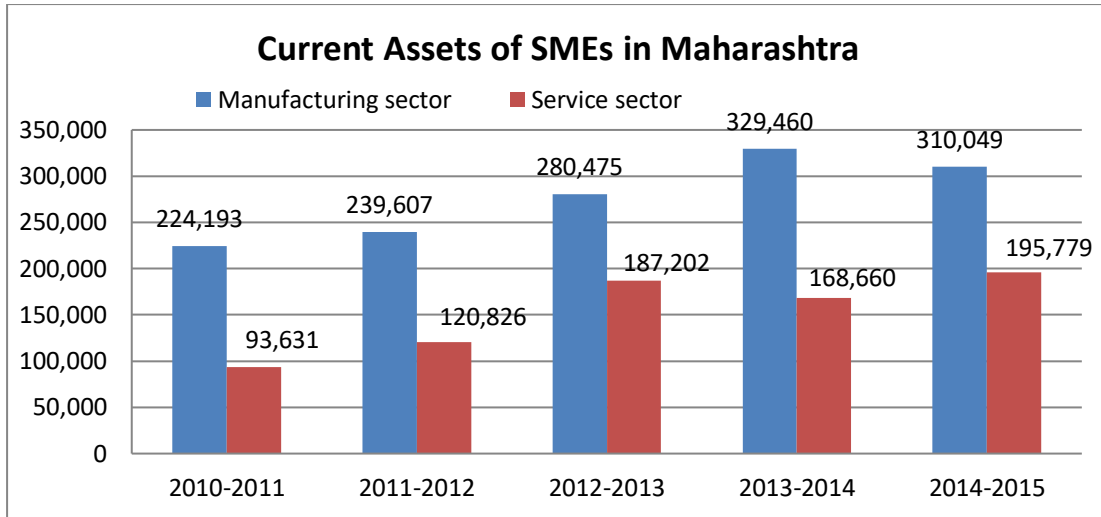
(Rs. in thousands)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV	Coeff. Of variance	% Growth
DRA Consultants Pvt Ltd	11,120	17,128	13,540	12,217	21,047	15,010	3,634	24%	14%
Suyog Telematics ltd	6,400	7,200	9,956	9,269	33,738	11,511	10,295	89%	39%
Comfort Commotrade ltd	400	2,026	1,108	4,706	8,173	3,184	2,848	89%	83%
Jupiter info media ltd	495	201	922	617	1,264	408	365	89%	21%
Cawasji Behramji Catering services Ltd	11,110	21,156	26,474	22,157	8,221	7,778	6,957	89%	-6%
Mitcon Consultancy & Engineering Services Ltd	1,08,807	99,179	70,890	53,547	46,098	27,557	24,647	89%	-16%
Creative Peripherals and Distribution Limited	5,334	9,036	15,852	7,649	6,699	4,107	8,914	217%	5%
AVG	20,524	22,275	19,820	15,737	17,891	**9,936**			

Source: - compiled from annual report of companies.

There is negligible percentage of growth in the Profit after tax of the selected SMEs. Comfort common trade ltd is the only one firm which has a spectacular growth rate of 113%. The standard deviation of the selected sample companies are showing high degree of variation

and this will affect the consistency of the data. When the profit after tax decreases, the entity finds it hard to acquire funds for future expansion of the enterprise. It will also find it difficult to give dividends. The researcher could not find a single SME that is distributing dividend.

Figure 5.3.3.2 : Net Profit After Tax of SMEs in Maharashtra
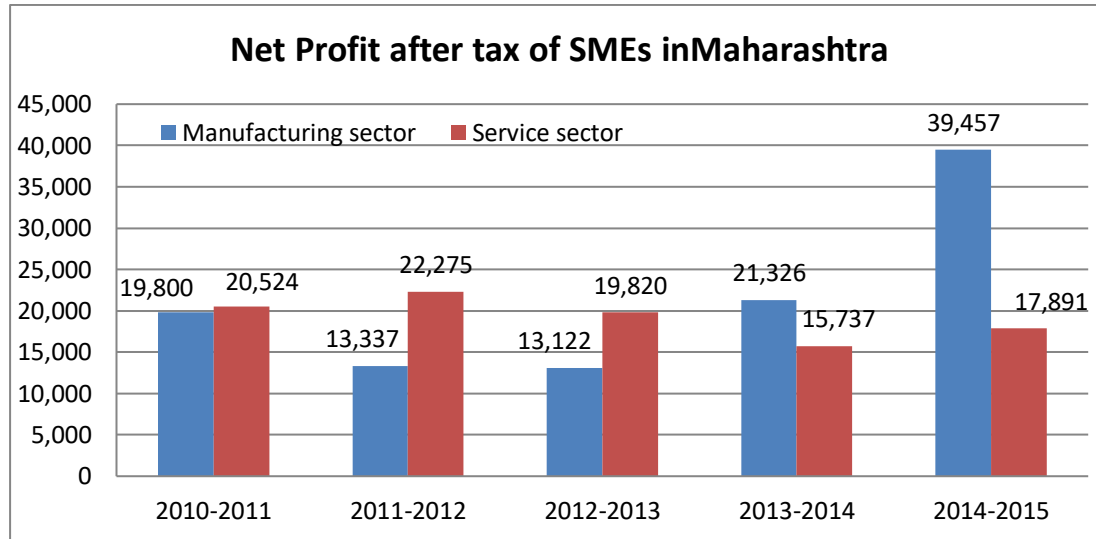
Source – Computed

Net profit after tax of SMEs of manufacturing and service sector of 2010-2011 to 2014-2015 indicates inconsistency and fluctuating trend. Over the years manufacturing sector have higher average net profit after tax than service sector.

CHAPTER - 6

INTERPRETATION AND DATA ANALYSIS

According to Myers, "financial statement analysis is largely a study of relationship among the various financial factors in business as disclosed by a single set of statements and a study of the trend of these factors as shown in a series of statements" Thus, "analysis of financial statements refers to the treatment of information contained in the financial statement in a way so as to afford a full diagnosis of the profitability and financial position of the firm concerned. And the process of analyzing financial statements involves the rearranging, comparing and measuring the significance of financial and operating data. Such a step helps to reveal the relative significance and effect of items of the data in relation to the time period and/or between two organizations."[89] Interpretation, which follows analysis of financial statements, is an attempt to reach to logical conclusion regarding the position and progress of the business on the basis of analysis. Thus, analysis and interpretation of financial statements are regarded as complimentary to each other.

Analysis of selected SMEs in Maharashtra

A) Manufacturing Sector

1. Bajaj Healthcare Ltd

2. Filtra consultants & engineers ltd

3. Ganga pharmaceuticals ltd

4. Valiant organic ltd

5. Patdiam jewellery ltd

B) Service Sector

1. DRA Consultants Pvt Ltd

2. Suyog Telematics ltd

3. Comfort Commotrade ltd

4. Jupiter info media ltd

5. Cawasji Behramji Catering services Ltd

6. Mitcon Consultancy & Engineering Services Ltd

7. Creative Peripherals and Distribution Limited

6.1 ANALYSIS OF PERFORMANCE OF LIQUIDITY MANAGEMENT OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

In this section, an attempt has been made to analyze liquidity management of the selected SMEs of Manufacturing and service sector in Maharashtra during the study period from 2010-11 to 2014-15

Liquidity Management

According to Anthony and Reece, "Liquidity refers to the company's ability to meet its current obligations. They further stated that 'solvency' on the other hand, pertains to the company's ability to meet the interest costs and repayment schedules associated with its long term obligations. A company's short-term liquidity risk is affected by the timing of cash inflows and outflows along with its prospects for future performance. The short-term is conventionally viewed as a period up to one year, though it is identified with the normal operating cycle of a company."[90]

6.1.1 Current Ratio

Table - 6.1.1 : A) Current Ratio of Manufacturing SMEs during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	0.87	0.85	0.85	0.87	0.94	0.88	0.04
Filtra consultants & engineers ltd	1.27	1.40	2.06	1.73	1.58	1.61	0.31
Ganga pharmaceuticals ltd	1.22	3.70	3.67	2.16	1.94	2.54	1.11
valiant organic ltd	2.52	1.59	1.66	2.08	3.01	2.17	0.60
Patdiam jewellery ltd	1.70	1.87	1.74	1.65	1.83	1.76	0.09
AVG	1.51	1.88	2.00	1.70	1.86		

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Table 6.1.1. A) highlights the values of current ratios during the study period from 2010-11 to 2014-15. It reveals that there exists fluctuating trends in the values of the Current Ratio .It

can be observed that selected SMEs have healthy liquidity conditions. Selected SMEs are solvent in short term.

Table - 6.1.1 : B) Current Ratio of Service SMEs during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	0.87	0.85	0.85	0.87	0.94	0.88	0.04
Suyog Telematics ltd	1.27	1.40	2.06	1.73	1.58	1.61	0.31
Comfort Commotrade ltd	1.22	3.70	3.67	2.16	1.94	2.54	1.11
Jupiter info media ltd	2.52	1.59	1.66	2.08	3.01	2.17	0.60
Cawasji Behramji Catering services Ltd	1.70	1.87	1.74	1.65	1.83	1.76	0.09
Mitcon Consultancy & Engineering Services Ltd	1.18	1.13	1.14	1.14	1.25	1.17	0.05
Creative Peripherals and Distribution Limited	0.90	0.84	0.84	0.85	0.91	0.87	0.03
AVG	1.38	1.63	1.71	1.50	1.64		

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

DRA Consultant PVT ltd. and Creative Peripherals and Distribution ltd have average current ratio 0.88 and 0.87 respectively. Current ratio of Suyog Telematics ltd indicates increasing trend from 1.27 in 2010-2011 to 1.58 in the year 2014-15.There is exorbitant amount of cash in hand in current assets of comfort commotrade ltd which has lead to an increase in current assets which further lead to an improvement of current ratio. Jupitor info media ltd , Cawasji Behramji catering service ltd shows fluctuating trend of current ratio during the study period.

Figure-6.1 Average Current Ratio of Selected SMEs during the study period from 2010-11 to 2014-15
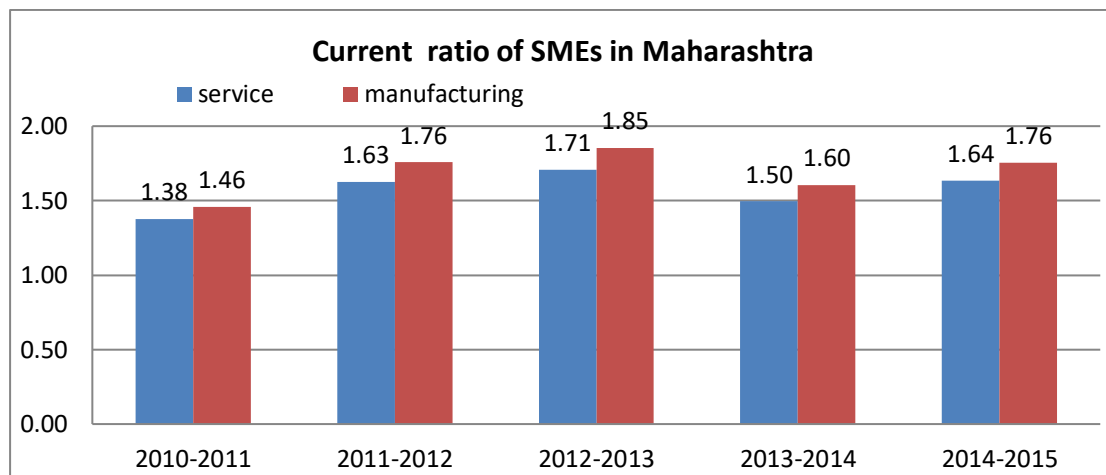
Source – Computed

In the study period 2010-2011 to 2014-2015, the average current ratio of manufacturing sector is in the range of 1.46 to 1.85 .The average current ratio of SMEs in Service sector is

within the range of 1.46 to 1.85 in the study period. SMEs in manufacturing sector have higher current assets than current liabilities as a result of greater proportion of inventory.

6.1.2 Quick Ratio

Table - 6.1.2 : A) Quick Ratioof Selected SMEs of Manufacturing sector in Maharashtra during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	0.55	0.61	0.66	0.64	0.72	0.64	0.06
Filtra consultants & engineers ltd	0.99	1.08	1.46	1.07	1.09	1.14	0.16
Ganga pharmaceuticals ltd	0.80	1.93	1.88	1.08	1.08	1.35	0.46
valiant organic ltd	1.86	1.25	1.06	1.59	2.49	1.65	0.50
Patdiam jewellery ltd	1.16	1.28	1.10	1.09	1.19	1.16	0.07
AVG	1.07	1.23	1.23	1.09	1.31	**1.19**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

It reveals that there are fluctuating trends in the values of its Quick Ratio. It can be observed that selected SMEs have healthy liquidity conditions. Selected SMEs are solvent in short term. Quick ratio of selected SMEs shows the increasing trend from the year 2010-2011 to 2015-2016 Almost all selected SMEs reveals short term solvent as the average quick ratio is higher. Valiant Organic ltd has the highest quick ratio 1.65 times followed by Ganga pharmaceutical ltd 1.35 times ,Filtra consultant & engineers ltd 1.14 times

Table - 6.1.2 : B) Quick Ratio of Selected SMEs of Manufacturing sector in Maharashtra during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	2.74	1.76	2.31	2.69	2.01	2.30	0.38
Suyog Telematics ltd	1.07	0.77	0.44	0.46	1.29	0.80	0.34
Comfort Commotrade ltd	3.03	5.60	1.43	2.66	1.76	2.90	1.47
Jupiter info media ltd	1.70	1.92	3.19	0.53	0.79	1.63	0.94
Cawasji Behramji Catering services Ltd	1.04	1.11	1.08	1.08	1.01	1.06	0.04
Mitcon Consultancy & Engineering Services Ltd	3.63	5.61	8.38	8.42	5.86	6.38	1.82
Creative Peripherals and Distribution Limited	0.77	0.57	0.77	0.76	0.95	0.76	0.12
AVG	2.00	2.48	2.52	2.37	1.95	**2.26**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Quick ratio is the Acid test ratio of short term solvency .The average quick ratio of DRA consultancy pvt ltd have fluctuating tendency .Suyog Telematics ltd have average ratio 0.80 times which is lower than the standards. Comfort commotrade ltd and Jupitor info media ltd have decreasing trend over the study period. Cawasji Behramji catering services ltd has the average quick ratio of 1.06 times .The highest quick ratio, 6.38 times of Mitcon consultancy & engineering services ltd .The lowest quick ratio ,0.76 times Creative Peripherals and

distribution ltd ,short term liquidity i.e quick liabilities are more than quick asset over the study period.

Figure-6.2:Average Quick Ratio Of Selected SMEs during the study period from 2010-11 to 2014-15

Quick ratio of SMEs in Maharashtra

■ service ■ manufacturing

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
service	2.00	2.48	2.52	2.37	1.95
manufacturing	1.07	1.23	1.23	1.09	1.31
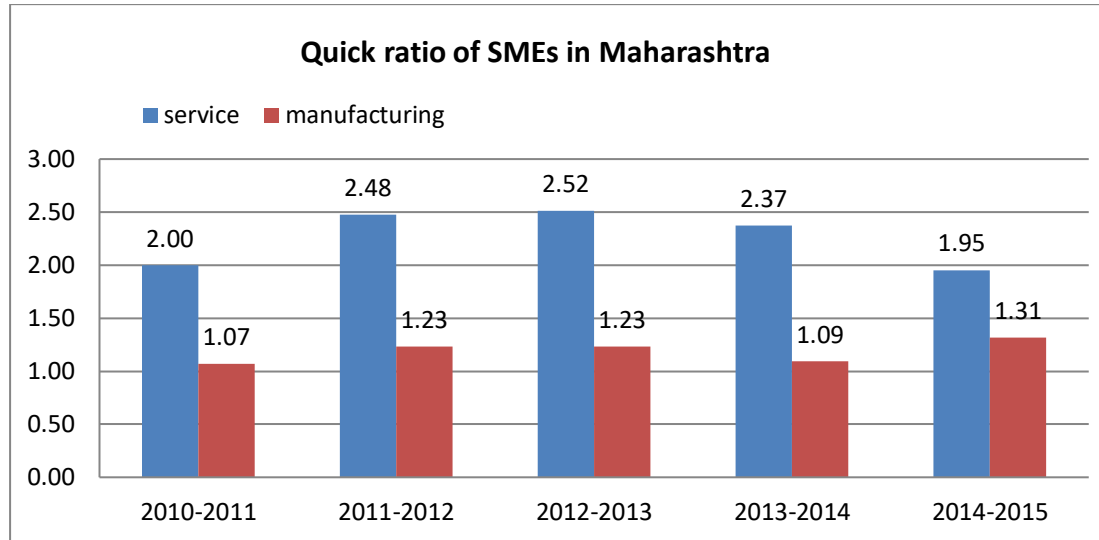
Source – Computed

SMEs of Manufacturing sector have quick ratio in the range between 1.95 to 2.52 times during the study period. SMEs in service sector have a quick ratio in the range of 1.07 to 1.31 times during the study period. Quick ratio in Service sector SMES are higher than service sector, this indicates higher liquidity is maintained in service sector SMEs than Manufacturing sector SMEs.

6.1.3 Cash to Current Asset ratio

"This is general perception that increase in sales leads to increase in cash balances. Generally, the volume of sales and size of cash balances in a business unit have a positive correlation. According to Prof. John Sagan ,The increase in sales is generally associated with larger bank balances."[91]

Table - 6.1.3 : A) Cash to Current Asset ratio of Selected SMEs of Manufacturing sector in Maharashtra during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	0.22%	0.88%	0.27%	1.39%	1.10%	0.77%	0.005
Filtra consultants & engineers ltd	17.96%	18.26%	20.66%	16.79%	19.04%	18.54%	0.013
Ganga pharmaceuticals ltd	4.13%	2.46%	8.88%	7.74%	8.54%	6.35%	0.026
valiant organic ltd	20.91%	20.47%	4.39%	4.39%	7.98%	11.63%	0.075
Patdiam jewellery ltd	1.63%	4.08%	10.59%	0.56%	1.70%	3.71%	0.036
AVG	8.97%	9.23%	8.96%	6.17%	7.67%	**8.20%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Cast to current assets ratio talks about the proportion of cash in the total current assets held by the entity. The more cash in hand, higher the liquidity of the firm. At the same time higher cash in hand poses a threat of unused funds held with the company. As seen from the table there are two companies whose cash to current assets ratio is greater than 10%. This will cause the funds to become idle and gradually fewer investments in fixed assets may lead to lower profitability in the future years. Company wise analysis indicates that the average percentages of cash to total current assets for Bajaj healthcare, Ganga pharmaceutical ltd,Patdiam jewellery ltd is 0.77 ,6.35 ,3.71 percent respectively which is lower than the average 8.20 percent . Filtra consultant &engineers ltd and Valiant organic ltd maintains cash pecent of current asset more than the average i.e 18.54 and 11.63 percent.

Table - 6.1.3 : B) Cash to Current Asset ratio Of Selected SMEs of Service sector in Maharashtra during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	23.93%	1.29%	5.49%	14.13%	3.27%	9.62%	0.08
Suyog Telematics ltd	2.25%	1.03%	0.74%	5.16%	1.45%	2.13%	0.02
Comfort Commotrade ltd	57.95%	93.78%	74.23%	87.85%	54.03%	73.57%	0.16
Jupiter info media ltd	8.24%	26.89%	7.74%	12.64%	20.14%	15.13%	0.07
Cawasji Behramji Catering services Ltd	1.31%	7.15%	9.61%	10.06%	9.43%	7.51%	0.03
Mitcon Consultancy & Engineering Services Ltd	51.46%	50.52%	28.95%	62.27%	30.26%	44.69%	0.13
Creative Peripherals and Distribution Limited	5.41%	5.59%	4.32%	4.89%	6.87%	5.42%	0.01
AVG	21.51%	26.61%	18.73%	28.14%	17.92%	**22.58%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

DRA consultant shows drastic decrease of cash component in current asset ,in 2010-2011 it was 23.93 percent and decrease to 3.27 percent in the year 2014-2015. Suyog Telematics ltd maintains very low cash ,i.e 2.13 percent .comfort commotrade ltd has the highest cash to current asset,the average is 73.7 percent followed by Mitcon consultancy and engineering ltd i.e 43 percent.

Figure-6.3 Average cash to Current Asset Ratio of Selected SMEs during the study period from 2010-11 to 2014-15

Cash to Current Asset ratio of SMEs in Maharashtra

Manufacturing ■ **Service** ■

Year	Manufacturing	Service
2010-2011	8.97%	21.51%
2011-2012	9.23%	26.61%
2012-2013	8.96%	18.73%
2013-2014	6.17%	28.14%
2014-2015	7.67%	17.92%
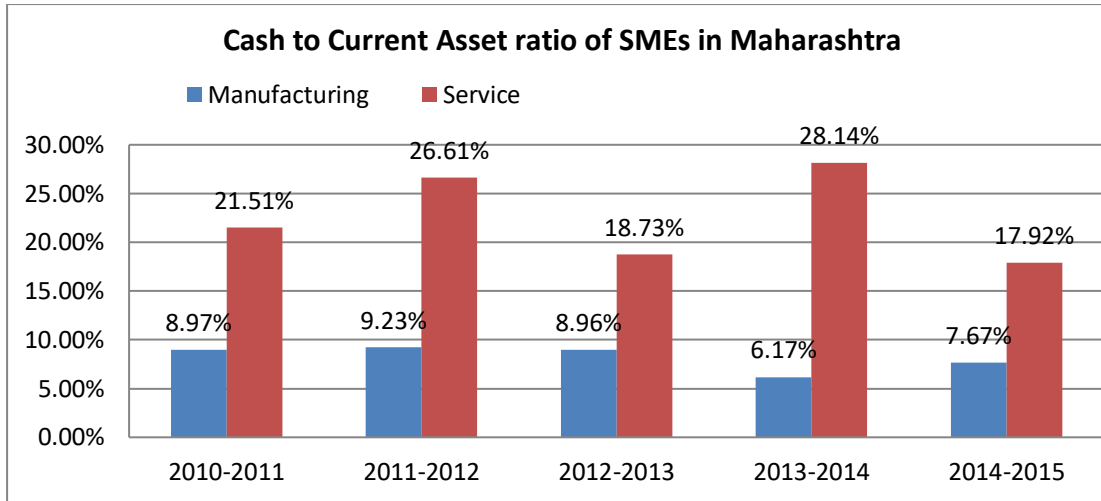
***Source** – Computed*

Manufacturing sector SMEs have lower cash to current asset ratio than Service sector. The average of Manufacturing sector broadly lies within the range of 6 percent to 10 percent wherein the service sector within 17 percent to 29 percent.

6.1.4 Current Assets to Total Asset Ratio

"There is no such standard for proportion of investment in current assets and fixed assets. Therefore, reaching to adequate liquidity and profitability is a challenge. Though, it can be achieved with the past experience of company's performance. Moreover, less but adequate investment in current assets enables firms to have a fair liquidity position as well as a better profitability."[92]

Table - 6.1.4 :   A.) Current asset to total asset ratio Of Selected SMEs of Manufacturing sector in Maharashtra during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	51.71%	51.52%	54.58%	59.47%	54.36%	54.33%	0.02872
Filtra consultants & engineers ltd	96.26%	95.30%	90.71%	93.70%	94.31%	94.06%	0.018858
Ganga pharmaceuticals ltd	49.70%	46.65%	43.61%	43.89%	43.96%	45.56%	0.023443
valiant organic ltd	47.01%	43.46%	48.78%	45.75%	35.13%	44.03%	0.04772
Patdiam jewellery ltd	85.38%	84.47%	87.32%	89.16%	89.82%	87.23%	0.020711
AVG	66.01%	64.28%	65.00%	66.39%	63.52%	**65.04%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Shows percentage of current assets to total assets used to achieve the given sales. As per current assets investment policy, it is found that Filtra consultant & engineers ltd ,Patdiam jewellery ltd had enough liquidity ,average current asset to total asset is 94.06 percent and 87.23 percent respectively. And Bajaj healthcare ltd have maintained average of 54.36 percent. Ganga pharmaceuticals ltd have also maintained average of 45.56 percent during study period. Valiant organic ltd have fluctuating current asset to total to asset ratio ,in the year 2010-2011 it was 47 percent which have decrease to 35 percent, this is due to decrease in inventory .

Table - 6.1.4 :   B) Current asset to total asset ratio (CATAR) Of Selected SMEs of Service sector in Maharashtra during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	63.38%	87.95%	85.59%	79.85%	53.22%	74.00%	0.134715
Suyog Telematics ltd	80.26%	48.48%	32.40%	23.18%	37.26%	44.32%	0.197357
Comfort Commotrade ltd	79.28%	80.49%	8.45%	16.48%	16.34%	40.21%	0.325279
Jupiter info media ltd	15.12%	18.52%	6.77%	4.60%	2.74%	9.55%	0.061657
Cawasji Behramji Catering services Ltd	81.24%	88.56%	92.30%	94.64%	93.78%	90.10%	0.048934
Mitcon Consultancy & Engineering Services Ltd	63.90%	69.23%	75.78%	68.87%	65.10%	68.58%	0.04158
Creative Peripherals and Distribution Limited	97.86%	97.86%	98.38%	98.83%	99.12%	98.41%	0.00508
AVG	68.72%	70.16%	57.10%	55.21%	52.51%	**60.74%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Jupitor infomedia Ltd has the average current asset to total asset ratio is 0 .17 which is the lowest among all selected SMEs as it depicts the lowest investment in working capital. Creative peripherals & distribution Ltd has maximum investment of 0.94.Comfort common trade CATAR   shows huge fluctuation .Above table reveals that selected SMES has maximum investment in working capital.

Figure-6.4 Average Current Ratio of Selected SMEs during the study period from 2010-11 to 2014-15

Current asset to total asset ratio of SMEs in Maharashtra
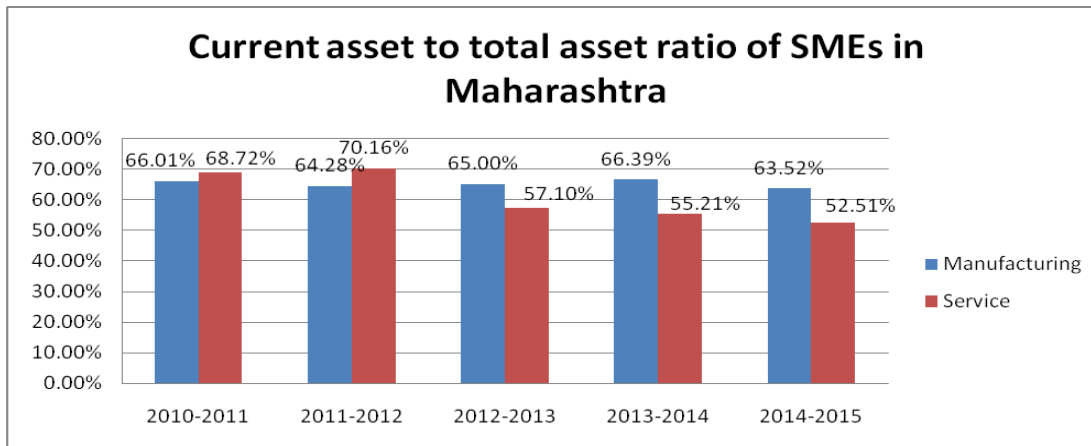
Source – Computed

"Low percentage of current assets to total assets indicates aggressive working policy that means liquidity and more profitability while risk of insolvency is high, and high percentage of current assets to total assets indicates excessive investment in current assets and it is considered as conservative policy of working capital."[93] SMEs follow conservative policy of working capital.

6.1.5 Liquid assets to Current Assets Ratio

Tabvle - 6.1.5 : A) Liquid assets to Current Assets Ratio of Selected SMEs of Manufacturing sector during the study period from 2010-11 to 20115

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	63.09%	71.51%	77.27%	73.17%	77.20%	72.45%	0.05
Filtra consultants & engineers ltd	77.56%	76.89%	70.56%	62.12%	69.17%	71.26%	0.06
Ganga pharmaceuticals ltd	65.47%	52.28%	51.28%	50.12%	55.53%	54.94%	0.06
valiant organic ltd	73.81%	79.02%	63.84%	76.36%	82.80%	75.17%	0.06
Patdiam jewellery ltd	68.48%	68.50%	63.50%	65.77%	65.23%	66.30%	0.02
AVG	69.68%	69.64%	65.29%	65.51%	69.98%	**68.02%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Bajaj Healthcare ltd has average 72.45 percent liquidity out of total current asset,27.55 percent is secured by inventory.Filtra consultant & engineers ltd indicates decreasing trend of liquid asset to current asset ratio from 77.56 percent in 2010-2011 to 69.17 percent in 2014-2015.Ganga pharmaceutical ltd has fluctuating trend within the range of 65 percent to 55.53 percent during study period. Valiant organic ltd has the highest average 75.17

percent.Patdiam jewellery ltd has average 66.30 percent which is lower to the industry average of 68.02 percent.

Tabvle - 6.1.5 : B) Liquid assets to Current Assets Ratio of Selected SMEs of Service sector during the study period from 2010-11 to 20115

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	100%	100%	100%	100%	100%	100%	0.000
Suyog Telematics ltd	91%	85%	95%	91%	95%	91%	0.039
Comfort Commotrade ltd	100%	100%	100%	100%	100%	100%	0.000
Jupiter info media ltd	100%	100%	100%	100%	100%	100%	0.000
Cawasji Behramji Catering services Ltd	99%	96%	89%	90%	89%	93%	0.043
Mitcon Consultancy & Engineering Services Ltd	99%	99%	99%	100%	100%	99%	0.003
Creative Peripherals and Distribution Limited	53%	42%	57%	54%	62%	54%	0.067
AVG	92%	89%	91%	91%	92%	**91%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

From the viewpoint of liquid asset to current assets ratio, the efficiency of inventory management on financial performance is best for the DRA consultants pvt ltd,Comfort commontrade ltd and Jupitor info media ltd for its highest average value. Mitcon consultancy and distribution ltd have 99 percent followed by Cawasji Behramji catering services ltd 93 percent, Suyog telematics ltd 91 percent. Creative peripherals and distribution and distribution ltd has average of 54 percent of its current asset .

Figure-6.5 Average Liquid Asset to Current asset ratio Of Selected SMEs during the study period from 2010-11 to 2014-15
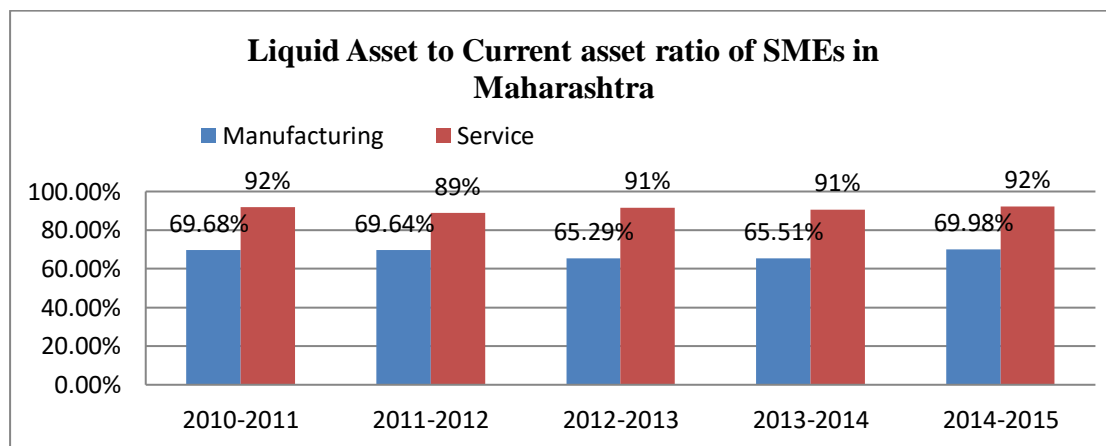
Source – Computed

Liquid asset to current asset is in the range of 89 percent to 92 percent in Service sector in Maharashtra during 2010-2011 to 2014-2015.In manufacturing sector, the range is between 89 percent to 92 percent during 2010-2011 to 2014-2015.

6.2 ANALYSIS OF PERFORMANCE OF WORKING CAPITAL MANAGEMENT OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

In this section, an attempt has been made to analyze **Working capital management** of the selected SMEs of Manufacturing and service sector in Maharashtra during the study period from 2010-11 to 2014-15

Working capital Management-Efficient working capital management is important from the point of view of both the liquidity and profitability. Profitability and inefficient working capital Working capital management means funds are unnecessarily tied up in idle funds. This reduces the liquidity as well as the ability to invest funds in productive asset thus affecting the profitability. Keeping in view the importance of working capital management, the financial manager should look into the framing of a suitable working capital policy of his firm:

6.2.1 Working Capital Turnover Ratio

This ratio reflects the extent to which a business is operating i.e., a small or a large amount of working capital in relation to sales. J.Batty chalks out the limits of the ratio and suggests that, "a normal ratio between sales and working capital should be established which is neither too high nor too low".[94]The ratio is computed to study over-trading or under-trading. A very high ratio may be the result of over-trading. Over trading is indicated by an increase in the amount of sales without corresponding increase in the amount of working capital. On the other hand a very low ratio may be the result of under-trading which means that more working capital funds have been invested in the business than needed.

Table - 6.2.1 : A)Working capital turnover Ratio of Selected SMEs of Manufacturing sector during the study period from 2010-11 to 20115

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	-15.02	-13.08	-13.31	-15.97	-41.59	-19.79	10.95
Filtra consultants & engineers ltd	7.95	13.23	8.17	7.00	7.46	8.76	2.27
Ganga pharmaceuticals ltd	4.76	1.29	1.52	2.20	2.35	2.42	1.23
valiant organic ltd	4.38	7.67	5.83	6.27	5.45	5.92	1.07
Patdiam jewellery ltd	3.02	1.69	1.74	1.92	2.62	2.20	0.53
AVG	1.02	2.16	0.79	0.28	-4.74	**-0.10**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

"Working capital turnover ratio in SMES for the study period is shown in table. In almost all the selected the ratio showed a fluctuating trend. it varied from 7.95 times in 2010-2011 to 7.46 in 2014-15 in Filtra consultant and engineers ltd, from 4.76 times in 2010-2011 to 2.35 times in 2014-15,Valiant organic ltd shows the increasing trend from 4.38 times to 5.45 times. Only Bajaj Healthcare ltd has negative working capital turnover ratio over the study with increasing trend which is due to working capital is negative in this unit.

Table - 6.2.1 : B)Working capital turnover Ratio of Selected SMEs of Service sector during the study period from 2010-11 to 20115

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	3.90	3.01	1.96	1.80	4.53	3.04	1.07
Suyog Telematics ltd	4.33	-17.90	-1.19	-1.96	5.09	-2.33	8.29
Comfort Commotrade ltd	2.07	0.74	5.02	1.88	3.64	2.67	1.49
Jupiter info media ltd	6.03	3.23	2.09	-1.98	-5.02	0.87	3.91
Cawasji Behramji Catering services Ltd	68.27	15.84	11.50	10.71	12.03	23.67	22.37
Mitcon Consultancy & Engineering Services Ltd	2.28	1.40	0.67	0.81	1.15	1.26	0.57
Creative Peripherals and Distribution Limited	16.45	15.92	15.02	17.32	16.87	16.32	0.80
AVG	14.76	3.18	5.01	4.08	5.47	**6.50**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Working capital turnover ratio of DRA Consultants ltd are fluctuating and inconsistent, in the year 2013-2014 the minimum ratio was 1.96 and 4.53 times in the year 2014-2015.In Suyog telematics ltd working capital turnover ratio is negative due to negative working capital and in the year 2014-2015 it shows the highest ratio 45.09 times .Comfort commotrade ltd indicates increasing trend. Jupitor info media ltd in the year 2013-2014 has negative 1.98 times and negative 5.02 in the year 2014-2015, in these years' short term liabilities have increased which resulted to negative working capital. Cawasji Behramji catering services ltd has the highest deviation during study period. Mitcon cosultancy and engineering service ltd has fluctuating ratio with minimum standard deviation of 0.57.Creative peripheral and distribution ltd has average working capital turnover ratio 16.32 times.

Figure-6.6 Average Working Capital Turnover Ratio Of Selected SMEs during the study
period from 2010-11 to 2014-15

Working Capital Turnover Ratio of SMEs in Maharashtra
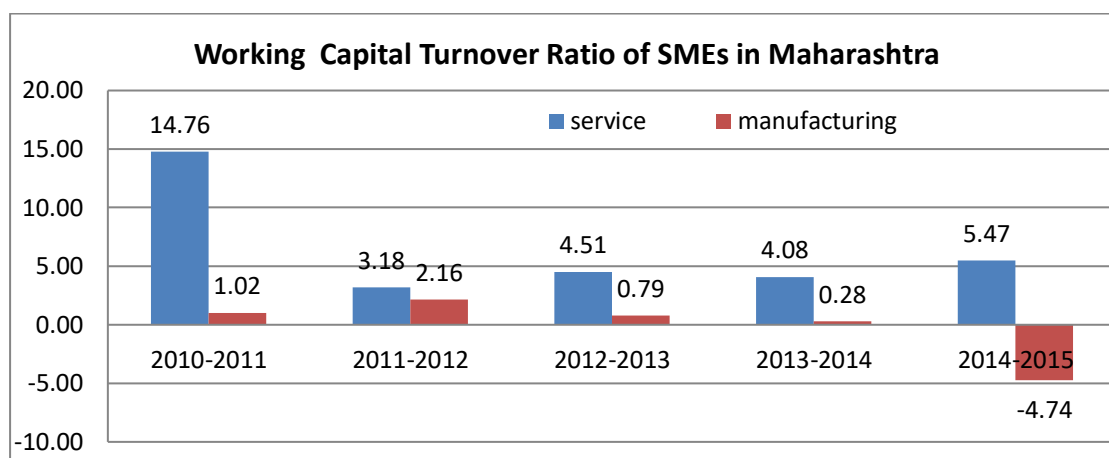
"The working capital turnover ratio shows the relationship between the funds used to finance a company's operations and the revenues a company generates as a result of conducting these operations. A higher working capital turnover ratio indicates that a company generates a higher the amount of sales for every rupee of the working capital used."[95] Above table shows Fluctuating and displays the lack of consistency, this is majorly due to fluctuating working capital.

6.2.2 Sales to Current Asset

The sales to current assets ratio is a financial estimate that can help to determine how efficiently a company is making use of its current assets to generate revenue.

Table - 6.2.2: A)Sales to Current assets of Selected SMEs of Manufacturing sector during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	2.24	2.26	2.39	2.37	2.75	2.40	0.18
Filtra consultants & engineers ltd	1.69	3.78	4.21	2.95	2.73	3.07	0.87
Ganga pharmaceuticals ltd	0.84	0.94	1.11	1.18	1.14	1.04	0.13
valiant organic ltd	2.65	2.83	2.33	3.25	3.64	2.94	0.46
Patdiam jewellery ltd	1.24	0.79	0.74	0.76	1.18	0.94	0.22
AVG	1.73	2.12	2.15	2.10	2.29	**2.08**	

Source: *Compiled and computed from the published annual reports of the selected SMEs in Maharashtra*

Bajaj Healthcare ltd has increasing trend 2.24 times in 2010-2011 to 2.75 times in 2014-2015.Filtra consultant & engineers ltd have increased tremendously 1.69 in the year 2010-2011 to 2.73 in the year 2014-15 .Ganga Pharmaceutical ltd have positively improved from 0.84 in the year 2010-2011 to 1.14 in the year 2014-2015.Valiant organic ltd have positively increased as it is a sign of growth .Patdiam jewellery ltd have fluctuating trend ,1.24 times in 2010-2011 ,lowest decrease to 0.74 times in 2012-2013 and again improved positively to 1.18 in the year 2014-2015.

Table - 6.2.2 : B)Sales to Current assets of Selected SMEs of Service sector during the study period from 2010-11 to 2014-15

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	2.48	1.30	1.11	1.13	2.28	1.66	0.594656
Suyog Telematics ltd	0.62	1.85	1.41	1.90	1.35	1.43	0.459787
Comfort Commotrade ltd	1.39	0.61	0.47	1.17	1.57	1.04	0.432233
Jupiter info media ltd	2.48	1.55	1.44	1.76	1.33	1.71	0.40998
Cawasji Behramji Catering services Ltd	3.01	2.22	2.07	1.80	1.42	2.10	0.527386
Mitcon Consultancy & Engineering Services Ltd	1.66	1.15	0.59	0.71	0.96	1.01	0.37613
Creative Peripherals and Distribution Limited	5.19	4.25	3.91	4.92	5.78	4.81	0.667434
AVG	2.40	1.85	1.57	1.91	2.10	**1.97**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

The table shows the relationship of sales to current asset. It represents the share of sales that the entity uses for its working capital management. It is evident from the table that on an average, more than 50% of the sales are being used for working capital requirements.

Creative Peripherals ltd has the highest ratio of 4.8 times,followed by Cawasji Behramji catering services ltd is 2.10.DRA consultant ltd, Suyog Telematics ltd,Comfort Commotrade,Jupitor Infomedia ltd and Mitcon Consultancy and engineering ltd lies within the range of 1 to 2 times.

Figure-6.7 Average Sales to Current Asset ratio of Selected SMEs during the study period from 2010-11 to 2014-15

Sales to Current Asset ratio of SMEs in Maharashtra
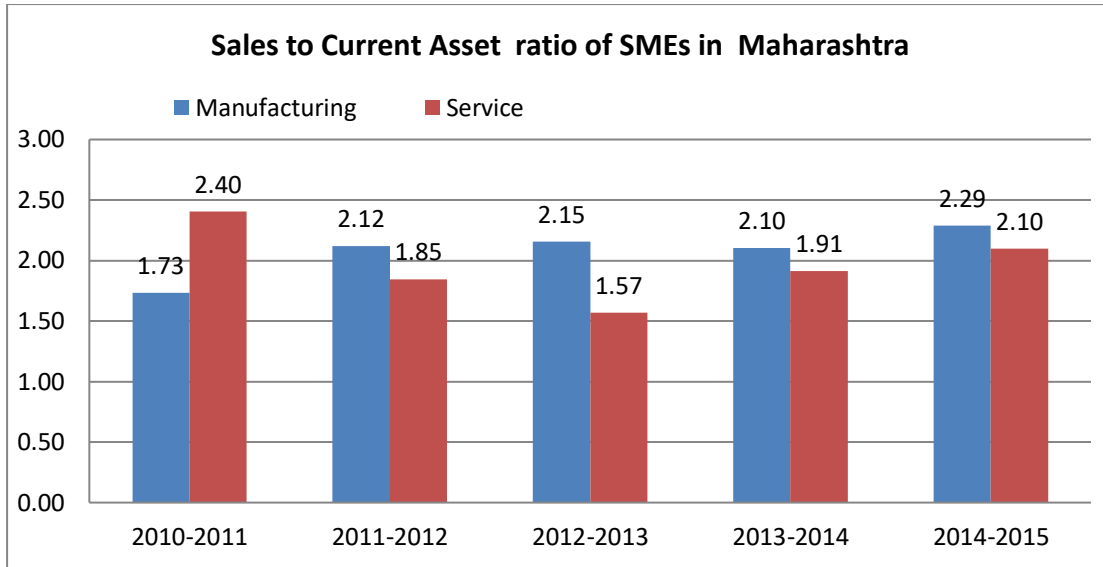
Source – Computed

"In general terms, when the value of the sales to current asset ratio is high, a company is supporting its business income with very few assets."[96] In case of Manufacturing sector, SMEs displays the growing trend .In case of service sector, sales to turnover displays the lack of consistency.

6.2.3 Debtors Turnover Ratio

"This ratio is very helpful when used in conjunction with short term solvency ratios i.e., current ratio and quick ratio. Short term solvency ratios measure the liquidity of the company as a whole and accounts receivable turnover ratio measures the liquidity of accounts receivables.

Analysts can compare the ratio with industry's standard. Generally, a high ratio indicates that the receivables are more liquid and are being collected promptly. A low ratio is a sign of less liquid receivables and may reduce the true liquidity of the business in the eyes of the analyst even if the current and quick ratios are satisfactory."[97]

Table - 6.2.3 :   A) Debtors turnover ratio (DTR) of SMEs in Manufacturing sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	4.62	4.07	3.83	3.74	4.24	4.10	0.312
Filtra consultants & engineers ltd	2.85	6.47	8.45	9.08	7.90	6.95	2.227
Ganga pharmaceuticals ltd	1.70	2.15	3.58	3.84	3.69	2.99	0.885
valiant organic ltd	5.29	5.16	4.04	4.91	5.11	4.90	0.448
Patdiam jewellery ltd	1.93	1.24	1.43	1.18	1.91	1.54	0.324
AVG	3.28	3.82	4.27	4.55	4.57	**4.10**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Baja healthcare ltd has average Debtors turnover ratio 4.10 times with minimum standard deviation of 0.312 .Filtra consultant & engineering ltd has the highest average DTR of approximately 7 times followed by Valiant organic ltd with approximately 5 times and Ganga pharmaceutical ltd approximately 3 times .The lowest DTR is in Patdiam jewellery ltd 1.54 times.

Table - 6.2.3 : B) Debtors turnover ratio of SMEs in Service sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	6.47	1.56	1.42	1.69	3.35	2.90	1.9
Suyog Telematics ltd	3.53	8.52	5.27	4.93	8.06	6.06	1.9
Comfort Commotrade ltd	20.33	31.21	18.55	25.82	40.49	27.28	8.0
Jupiter info media ltd	4.90	4.76	6.26	10.77	26.64	10.67	8.3
Cawasji Behramji Catering services Ltd	3.88	2.52	2.93	2.54	1.96	2.76	0.6
Mitcon Consultancy & Engineering Services Ltd	4.98	3.25	2.51	2.75	2.59	3.21	0.9
Creative Peripherals and Distribution Limited	12.78	12.50	9.16	14.15	13.55	12.43	1.7
AVG	8.12	9.19	6.58	8.95	13.81	**9.33**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Comfort commotrade ltd has the highest Debtors turnover ratio 27.28 times followed by Creative Peripheral and distribution ltd 12.43 times ,Jupitor infomedia ltd 10.67 times ,Suyog telematics ltd 6 times Mitcon Consultancy & Engineering services ltd 3.21 times .Cawasji Behramji catering services ltd and DRA consultancy pvt ltd have very low debtors turnover ratio of 2.76 times and 2.90 times respectively.

Figure-6.8 Average Debtors Turnover ratio of Selected SMEs during the study period from 2010-11 to 2014-15

Debtors Turnover ratio of SMEs in Maharashtra
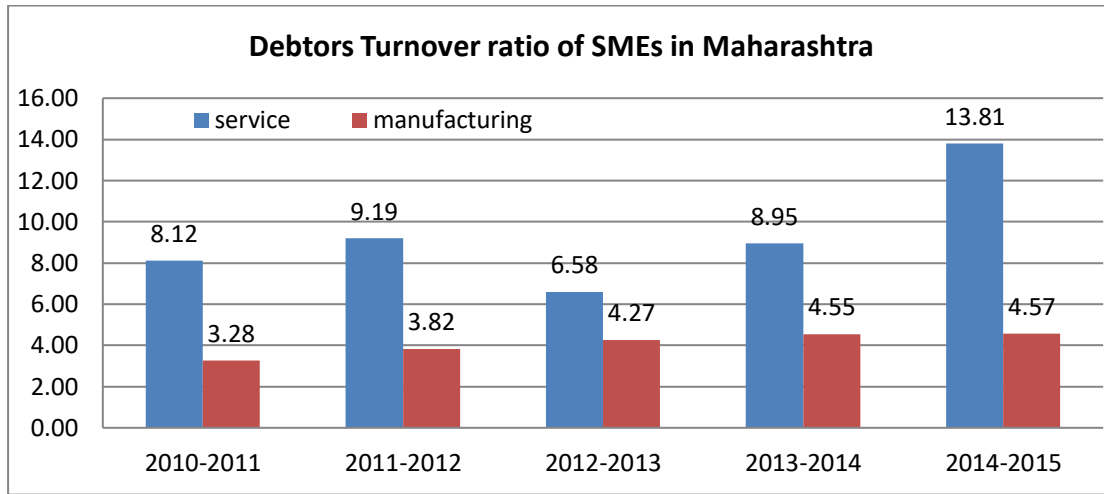
Source – Computed

Debtors turnover ratio is Conversion of debtors into cash .In case of Service sector SMEs have higher DTR in the range of 8.12 time to 13.81 times .In case of Manufacturing sector , the range is between 3.28 times to 4.57 times .Service sector has higher turnover than manufacturing sector ,it indicates the sign of quick recovery of Debts.

6.2.4 Credit Strength Ratio

From the financial point of view net worth provides credit strength to the business, as a lender (creditors) will invariably examine the net worth of an enterprise to assess the ultimate risk of providing loans. Current liability holder have claim on net worth, though unsecured. This because being unsecured ultimately creditors has to fall back on net worth in case of non payment or bankruptcy of company.[98]

Table - 6.2.4 : A)Credit strength ratio of manufacturing SMEs in Maharashtra

(In terms of times)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	2.18	2.54	3.03	3.33	2.27	2.67	0.45
Filtra consultants & engineers ltd	3.14	2.16	0.80	1.30	1.08	1.69	0.85
Ganga pharmaceuticals ltd	0.85	0.26	0.22	0.40	0.50	0.45	0.23
valiant organic ltd	0.32	0.51	0.59	0.41	0.21	0.41	0.13
Patdiam jewellery ltd	1.02	0.83	1.02	1.18	0.98	1.01	0.11
AVG	1.50	1.26	1.13	1.32	1.01	**1.24**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

A credit strength ratio between 1.75 and 2.0 provides a reasonable cover and control against undue advantage of short term credit, without making the firm too conservative.

Bajaj Healthcare ltd credit Strength ratio is higher than the standard desirable dependence on current liabilities .Filtra consultant &engineers ltd is erratic and downward trend. Valiant organic ltd. has least proportion of current liabilities to net worth. Patdiam jewellery ltd has nearby approximately ratio 1 times which reflect balanced use of funds outstanding.

Table - 6.2.4 : B)Credit strength ratio of manufacturing SMEs in Maharashtra

(In terms of times)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	0.34	1.04	0.60	0.43	0.37	0.56	0.29
Suyog Telematics ltd	2.19	1.28	2.42	1.14	0.51	1.51	0.79
Comfort Commotrade ltd	0.35	0.60	0.28	0.27	0.37	0.37	0.13
Jupiter info media ltd	0.10	0.11	0.02	0.10	0.04	0.07	0.04
Cawasji Behramji Catering services Ltd	2.33	3.14	3.16	3.40	3.70	3.15	0.51
Mitcon Consultancy & Engineering Services Ltd	0.19	0.13	0.10	0.08	0.09	0.12	0.04
Creative Peripherals and Distribution Limited	2.77	3.21	3.16	2.96	2.21	2.86	0.40
AVG	1.18	1.36	1.39	1.20	1.04	1.23	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

The average credit strength ratio DRA Consultant pvt ltd is 0.56 .Suyog Telematics ltd has ratio between 0.51 to 2.42 whereas the average ratio is balanced .Comfort commontrade has only 0.37 proportions of current liabilities covering its net worth. Service sector sample SMEs have less dependence on current liabilities which reflects the companies are safe.

Figure-6.9 Average Credit Strength Ratio of Selected SMEs during the study period from 2010-11 to 2014-15
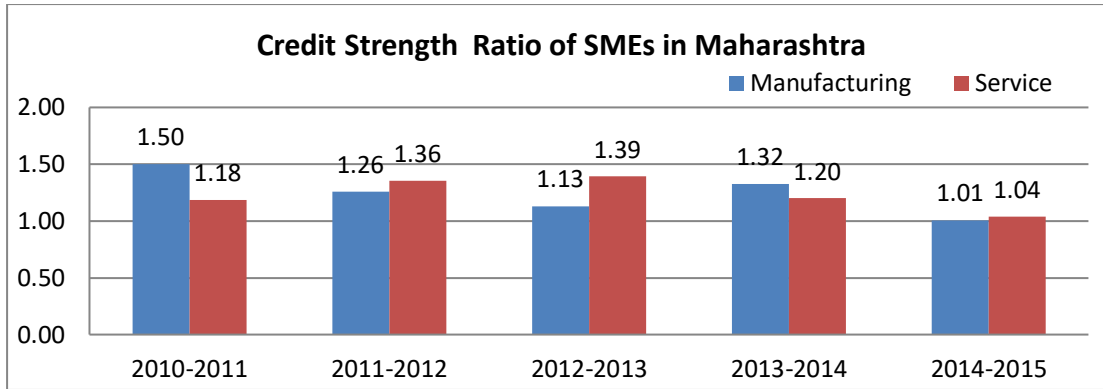
Source – Computed

The average Credit to net worth ratio reflects downward and erratic trend in sample SMEs of Maharashtra. Credit strength ratio of Manufacturing sector is in the range of 1.01 times to 1.50 times. Credit strength ratio of Service sector is in the range of 1.04 times to 1.39 times.

6.3 ANALYSIS OF SOLVENCY OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

Solvency ratios are primarily used to measure a company's ability to meet its long-term obligations. In general," a solvency ratio measures the size of a company's profitability and compares it to its obligations. By interpreting a solvency ratio, an analyst or investor can gain insight into how likely a company will be to continue meeting its debt obligations. A stronger or higher ratio indicates financial strength. In stark contrast, a lower ratio, or one on the weak side, could indicate financial struggles in the future."[98]

1. Fixed Assets to Long term funds Ratio
2. Debt To Asset Ratio
3. Interest Coverage ratio
4. Degree of Financial Leverage

6.3.1 Fixed Assets to Long Term Funds Ratio

Fixed assets ratio explains whether the company has raised adequate long-term funds to meet its fixed assets requirements. This ratio gives an idea as to what part of the capital employed

has been used in purchasing fixed assets for the concern. If the ratio is less than one, it is good for the concern. The ideal ratio is 0.67.

Net fixed assets: (Total of fixed assets – Total **depreciation** till date) + Trade Investments including shares in subsidiaries.

Long-term funds: Share capital + Reserves + Long-term loans.

Table - 6.3.1 :A) Fixed Assets to long term funds Ratio in Manufacturing sector

(In terms of Percent)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	83%	96%	117%	122%	107%	105%	0.14
Filtra consultants & engineers ltd	10%	5%	14%	9%	6%	9%	0.03
Ganga pharmaceuticals ltd	21%	14%	16%	16%	16%	17%	0.03
valiant organic ltd	48%	53%	45%	38%	36%	44%	0.06
Patdiam jewellery ltd	18%	17%	15%	14%	11%	15%	0.03
AVG	36%	37%	41%	40%	35%	**38%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Solvency represents the ability of the company to meet its obligations over a long term period of time. It is a yardstick to measure the long term financial health of the company.

Fixed Assets to long term funds Ratio should not exceed one as it could be an indicator of excessive borrowings. Ratio of more than 1 indicates net fixed assets of the company are more than its long-term funds which demonstrates that the company has bought some of its fixed assets with the help of short-term funds.

From the table it is evident that most of the SMEs are having a strong fixed asset ratio.

Only Bajaj health care ltd has an average fixed asset ratio greater than one which depicts operational inefficiency. This is because the fixed assets are financed by short term borrowings .It can be observed borrowings of the company is showing constant increase over the study period. The first reason can be a low interest rates charged on short term borrowings which further leads to a lower amount of instalments. The second reason can be financial institutions or lenders trust the credibility of owner instead of keeping a charge on collateral assets.

Grand mean is 38%,Bajaj Health care and Valiant organic ltd is exceeding over aggregate average of manufacturing industry. Filtra consultant &engineering ltd, Ganga Pharaceutical ltd,Patadiam jewellary ltd is below grand mean.

In General, SMEs have lower percent of fixed assets of total long term funds. It is desirable to some extent as it means that a company has sufficient long-term funds to cover its fixed assets.

Table - 6.3.1 :   B) Fixed Assets to long term funds Ratio in Service sector

(In terms of Percent)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	18%	19%	13%	10%	7%	13%	0.04
Suyog Telematics ltd	33%	38%	83%	73%	65%	59%	0.20
Comfort Commotrade ltd	27%	44%	45%	26%	22%	32%	0.10
Jupiter info media ltd	4%	3%	1%	2%	7%	3%	0.02
Cawasji Behramji Catering services Ltd	53%	46%	31%	22%	25%	35%	0.12
Mitcon Consultancy & Engineering Services Ltd	40%	32%	26%	32%	28%	32%	0.05
Creative Peripherals and Distribution Limited	6%	7%	5%	4%	2%	5%	0.02
AVG	26%	27%	29%	24%	22%	**26%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

"The ratio should not be more than one. If it is less than one, it shows that a part of the working capital has been financed through the long-term funds. This is desirable to some extent because a part of the working capital termed as "core working capital" is more or less of a fixed nature the ideal ratio is 0.67:1."[99]

The grand mean of Fixed Assets to long term funds Ratio in service sector of sample is 23%.DRA consultancy pvt.ltd.,Comfort commontrade ltd,Jupitor Info media ltd,Creative peripherals and Distribution ltd have lower Fixed asset ratio which shows that long term funds are used more for working capital. Suyog Telematics ltd have invested huge amount in fixed asset in the year 2012-13 using long term borrowed funds. The standard deviation value further indicated moderate fluctuation in this ratio during the study period.

This Table is a clear indication that the firm has less investment in fixed assets. In general all sample companies show an ideal fixed assets ratio. It can be derived that SMEs have a strong long term solvency.

Figure-6.10 Average Fixed Assets to long term funds Ratio of Selected SMEs during the study period from 2010-11 to 2014-15

Fixed Assets to long term funds Ratio Of SMEs in Maharashtra

Chart showing Manufacturing Sector (blue) and Service Sector (red):

Year	Manufacturing Sector	Service Sector
2010-2011	36%	26%
2011-2012	37%	27%
2012-2013	41%	29%
2013-2014	40%	24%
2014-2015	35%	22%
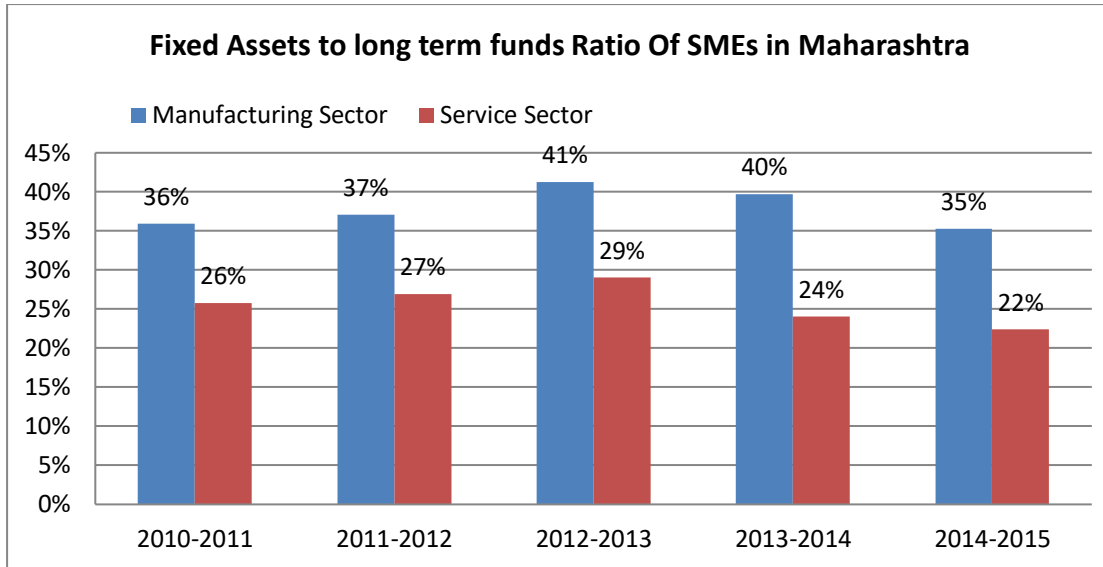
Source – Computed

Average Fixed asset to Long term funds ratio of service sector Small and Medium enterprises is lower compare to manufacturing sector .Average ratio in service sector is in the range of 22%-29% where in average ratio of Manufacturing sector is in between 35%-41% as manufacturing sector have higher investment in fixed assets compare to service sector.

6.3.2 Long Term Debt to Asset Ratio

This ratio indicates the proportion of long term borrowed funds in the total assets of the company.

Table - 6.3.2 :A) Debt to Asset ratio of Selected SMEs   (Figures in Times)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	12%	14%	13%	10%	15%	13%	0.02
Filtra consultants & engineers ltd	0%	0%	1%	2%	2%	1%	0.01
Ganga pharmaceuticals ltd	11%	39%	34%	29%	28%	28%	0.09
valiant organic ltd	0%	0%	0%	24%	33%	11%	0.14
Patdiam jewellery ltd	0%	1%	0%	0%	1%	0%	0.00
AVG	5%	11%	10%	13%	16%	**11%**	

Source: - compiled from annual report of companies.

Above table depicts that the almost all the companies' use equity in financing their assets. Most of the companies use more equity in proportion to their debt. As depicted by table, we can clearly see that Comfort common trade ltd is using least debt in proportion to equity in financing their assets. This company is using debt with the mean of 0.12 indicating that the company finances its most of assets by equity. Using high Equity than debt with an average of 0.12 in financing their assets which also indicates that the company is low leveraged one. Lowest standard deviation 0.02 of Cawasji Behramji Catering services ltd indicates that these companies are using debt in same proportions in the study period in relation to their equity.

Table - 6.3.2 :B) Debt to Asset ratio of Selected SMEs   (Figures in Times)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	9%	2%	1%	1%	1%	3%	0.03
Suyog Telematics ltd	0%	0%	0%	14%	19%	7%	0.08
Comfort Commotrade ltd	0%	0%	0%	0%	0%	0%	0.00
Jupiter info media ltd	0%	0%	0%	0%	0%	0%	0.00
Cawasji Behramji Catering services Ltd	2%	1%	1%	1%	3%	2%	0.01
Mitcon Consultancy & Engineering Services Ltd	6%	4%	4%	3%	3%	4%	0.01
Creative Peripherals and Distribution Limited	14%	11%	8%	10%	10%	11%	0.02
AVG	5%	2%	2%	4%	5%	**4%**	

Source: - compiled from annual report of companies.

In Service sector ,DRA consultant pvt ltd has 3 percent debt financing for total assets.

Comfort commotrade and Jupitot info media ltd finance its total assets only through own funds. Creative peripherals and distribution ltd has the highest investment through debt ie.11 percent followed by Suyog telematics ltd i.e 7 percent,Mitcon consultancy & engineering ltd has only 4 percent and Cawasji Peripherals and Distribution ltd 2 percent.

Figure-6.11 Average Debt to Assets Ratio of Selected SMEs during the study period from 2010-11 to 2014-15
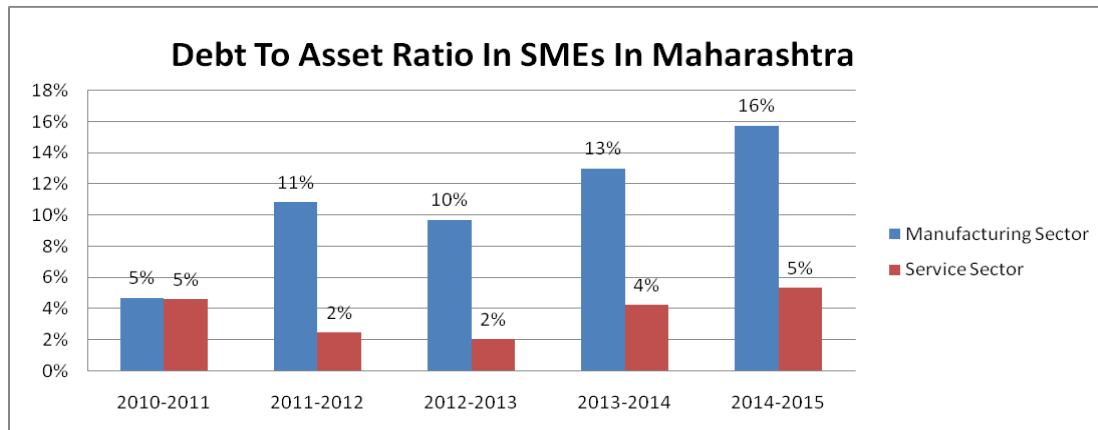
Source: - compiled from annual report of companies.

Manufacturing sector have increased use of debt over the study period ,the range is between 5 percent to 16 percent .In service sector use of Debt is low compare to Manufacturing i.e within 2 percent to 5 percent.

6.3.3   Interest Coverage Ratio

Table - 6.3.3 :A) Interest coverage ratio of Selected SMEs of manufacturing sector

(Figures in times)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	2.39	1.22	0.76	1.46	2.52	1.67	0.68
Filtra consultants & engineers ltd	NA	NA	NA	NA	NA	NA	NA
Ganga pharmaceuticals ltd	NA	NA	NA	NA	NA	NA	NA
valiant organic ltd	17.83	16.87	14.94	18.70	33.46	20.36	6.67
Patdiam jewellery ltd	1.64	1.66	1.56	1.46	1.62	1.59	0.07
AVG	7.29	6.58	5.76	7.21	12.53	**7.87**	

Source: - compiled from annual report of companies.NA –as no borrowed fund

Filtra Consultants & engineers ltd. and Ganga pharmaceutical ltd shows that they have not borrowed any funds and are self sufficient enough to run its business smoothly and there is possibility of further expansion and to maintain sustainable business.

Table - 6.3.3 : B) Interest coverage ratio of Selected SMEs of Service sector in Maharashtra   (Figures in times)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	54.62	92.53	50.66	10.74	10.27	43.76	30.84
Suyog Telematics ltd	NA	NA	2.08	2.11	4.20	2.80	0.99
Comfort Commotrade ltd	NA	3048.00	249.29	635.87	739.51	1168.17	1100.59
Jupiter info media ltd	NA	NA	8.44	3.30	7.79	6.51	2.28
Cawasji Behramji Catering services Ltd	12.54	13.90	5.76	3.13	1.78	7.42	4.92
Mitcon Consultancy & Engineering Services Ltd	181.96	264.53	118.77	137.58	134.42	167.46	52.89
Creative Peripherals and Distribution Limited	1.71	1.75	2.10	1.51	1.36	1.69	0.25
AVG	62.71	93.18	62.44	113.46	128.48		

Source: - compiled from annual report of companies.

The Above table depicts that Comfort common Trade ltd and,Mitcon Consultancy & Engneering services ltd, are having maximum interest coverage ratio as compared to other companies with a mean of 1168 times , 59.14 times respectively which indicates that these companies are having less burden of debt expenses.

In addition to this, these firms are highly debt attractive companies. On the other hand the companies like Creative Peripherals and Distribution SME. having minimum interest coverage ratio with a mean 1.69 times indicating that these companies are much burdened with financial charges as compared to other companies under study. Furthermore, it also means that these companies are not very much attractive enough in terms of debt financing.

Taking into consideration the standard deviation of the companies under study, it is clear that the Comfort Common Trade Ltd is having maximum standard deviation of 1168 implying that the company is paying interest at a huge fluctuating rate and Creative Peripherals & Distribution company is having lower standard deviation of 0.28 as compared to other companies indicating that the company is constantly paying its interest dues in an average trend.

Figure-6.12 Average Interest Coverage Ratioof Selected SMEs during the study period from 2010-11 to 2014-15
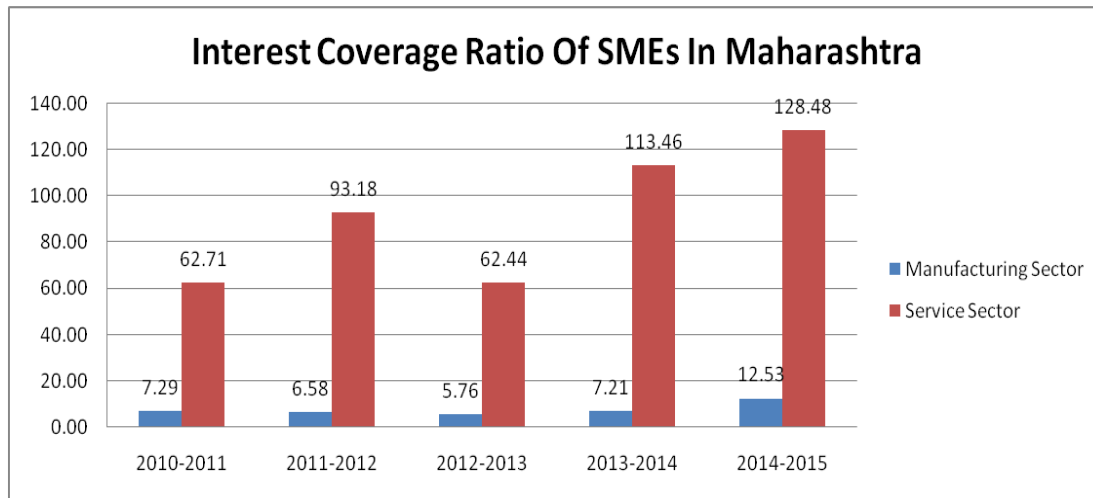
Source – Computed

Interest Coverage ratio is very high in Service Sector compare to Manufacturing sector .Manufacturing sector SMEs has a range of 62.71 times to 128.48 times. Service sector SMEs has a range of 5.76 times to 12.53 times.

6.3.4 Financial Leverage

A leverage ratio is one of financial measurements that look at how much capital comes in the form of debt (loans), or assesses the ability of a company to meet its financial obligations. The leverage ratio is important given that companies rely on a mixture of equity and debt to finance their operations and knowing the amount of debt held by a company is useful in evaluating whether it can pay its debts off as they come due.

Table - 6.3.4 :A) Financial Leverage of Manufacturing sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	1.14	1.14	0.56	1.27	0.47	0.91	0.33
Filtra consultants & engineers ltd	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Ganga pharmaceuticals ltd	0.01	0.03	0.04	0.04	0.05	0.03	0.01
valiant organic ltd	1.06	1.06	1.07	1.06	1.03	1.06	0.01
Patdiam jewellery ltd	2.57	2.52	2.77	3.16	2.62	2.73	0.23
AVG	1.15	1.15	1.09	1.30	1.03	**1.15**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

An Financial leverage of 1.5 indicates a good mix of debt and equity,2 is challenging. The financial risk of enterprise increases as Financial Leverage moves beyond 2.However Financial leverage below 1 indicates that the firm is highly risk averse. Bajaj health care ltd has decreasing trend ,average is below 1 i.e. 0.91.Filtra Consultant & engineers ltd has 1 consistently. Ganga pharmaceutical ltd average is below 1 i.e. 0.03. Valiant organic ltd has average Financial leverage 1.06 .Patdiam jewellery ltd has increasing trend .

Table - 6.3.4 : B)Financial Leverage of Service sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	0.63	1.01	1.02	1.10	1.11	0.98	0.18
Suyog Telematics ltd	1.00	1.00	1.93	1.90	1.31	1.43	0.41
Comfort Commotrade ltd	0.38	1.00	1.00	1.00	1.00	0.88	0.25
Jupiter info media ltd	1.00	1.00	1.13	1.43	1.15	1.14	0.16
Cawasji Behramji Catering services Ltd	0.43	0.52	0.34	0.40	0.33	0.40	0.07
Mitcon Consultancy & Engineering Services Ltd	1.01	1.00	1.01	1.01	1.01	1.01	0.00
Creative Peripherals and Distribution Limited	0.70	0.15	0.19	0.16	0.22	0.28	0.21
AVG	0.73	0.81	0.95	1.00	0.87	**0.87**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

The higher the leverage of the company, the more risk it has, and a business should try and balance it as leverage is similar to having a debt. Suyog Telematics ltd has the highest degree of financial leverage 1.43 as profit is very low and finance charges are very high as compare to profits.

DRA consultant pvt ltd ,Comfort commotrade ltd ,Cawasji Behramji Catering services ltd, Creative Peripherals and Distribution ltd has less than 1 Financial average Ratio.

Figure-6.13   Average Financial Leverage Ratio of Selected SMEs during the study period from 2010-11 to 2014-15
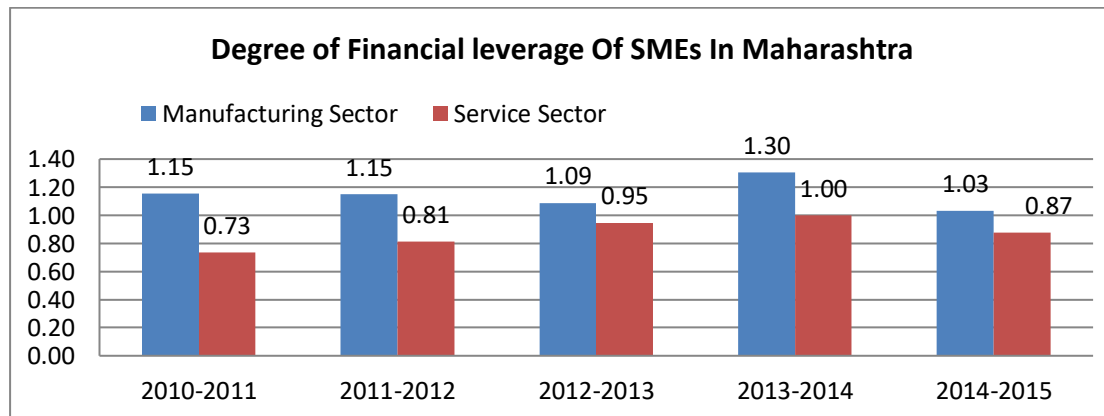
Source – Computed

The average Financial Leverage Ratio of selected SMEs in manufacturing sector is in the range of 1.03 to 1.15 during study period. The average Financial Leverage Ratio of selected SMEs in service sector is in the range of 1.03 to 1.15 during study period

6.4 ANALYSIS OF PERFORMANCE OF CAPITAL STRUCTURE OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

According to S.C.Kuchal, "within this framework of equating the rate of return and the cost of capital, capital structure is sought by using a proportion of debt such that the correct degree of trading on equity leading to financial leverage will cause the highest market value of the ordinary shares".[100] Capital structure, therefore, involves a choice between size and expected returns.

1. Debt Equity ratio

2. Proprietary Ratio

6.4.1 Debt-Equity Ratio

The long-term solvency of a firm can be judged with capital structure ratios. The relationship between borrowed funds and the owner's capital is an accepted measure of the long-term solvency of a company which is shown by the debt-equity ratio. The object of calculating the debt-equity ratio is to measure the relative interest of owners and creditors of the firm. The ratio indicates the proportionate claims of owners on the firm's assets. The purpose is to get an idea of the cushion available to outsiders on the liquidation of the firm. A ratio of 1:1 may be usually considered satisfactory, although there cannot be any rule of thumb for all types of business.

In a comprehensive study of Indian corporate sector made by Chakraborty (1997)[101], "total debt to equity was considered to represent the debt-equity ratio." Shanmugasundaram (2008)[102] in his research work used "both short- term and long-term borrowings in the debt equity ratio to represent the capital structure." In a research work of Raghvir Kaur and N Krishna Rao (2009)[103] "total debt has been considered to calculate the debt-equity ratio and

the reason quoted for using total debt in their study is that the so called short term debt usually taken for financing current assets, gets renewed or renegotiated every year." As a result, the short term debt also becomes permanent and repaid in instalments. Similarly, in this study also total debt to equity has been considered to represent the debt-equity ratio.

Table - 6.4.1 : A) Debt-Equity Ratio of Manufacturing Sector

(In terms of percent)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	1.47	1.83	2.29	2.12	1.60	1.86	0.31
Filtra consultants & engineers ltd	-	-	-	-	-	-	0.00
Ganga pharmaceuticals ltd	0.92	0.87	0.64	0.80	0.87	0.82	0.10
valiant organic ltd	0.13	0.16	0.27	0.36	0.04	0.19	0.11
Patdiam jewellery ltd	0.71	0.75	0.89	0.87	0.83	0.81	0.07
AVG	0.65	0.72	0.82	0.83	0.67	**0.74**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Debt and equity are the main source of funds of any company. The ideal mixture of debt and equity in the capital structure helps the company to perform better. When the proportion of debt increases, it creates a risk of bankruptcy for the entity.

The above table depicts that most of the companies usually employ debt relatively lower than their equity. Among these companies the ratio of Bajaj health care Ltd. has highest average 1.86 as compared to other companies is relatively higher with a mean of 0.74 which indicates that this company is aggressively financing its growth with debt, the reason of higher Debt equity ratio may be the nature of the business. In case of Valiant organic ltd ,this ratio is very low with a mean of 0.19 indicating that the company wants to retain much control over the company. In addition, this company has minimum standard deviation as compared to other companies during the period of study.

Filtra Consultant & engineers ltd is zero debt company

The debt-equity mix of the sample shows that their long-term financial strength was sound during the year 2010-11 to 2014-15, as the proportion of debt was always less Debt than the equity. The debt-equity do varied from a minimum of 0.19 .Data indicates that the increasingly using more equity than debt for meeting its financial needs. There were debt fluctuations in the mix of debt and equity capital structure. From the creditor's point of view,

the long-term financial position was sound as the company had sufficient equity funds to pay the debt.

Table - 6.4.1 : B) Debt-Equity Ratio of Service Sector

(In terms of percent)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	0.16	0.08	0.02	0.01	0.00	0.05	0.06
Suyog Telematics ltd	1.01	0.51	1.59	1.01	0.55	0.93	0.39
Comfort Commotrade ltd	0	0	0.003	0	0.016	0.00	0.01
Jupiter info media ltd	0	0	0.008	0.081	0.019	0.02	0.03
Cawasji Behramji Catering services Ltd	0.33	1.17	1.44	1.57	1.62	1.23	0.48
Mitcon Consultancy & Engineering Services Ltd	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Creative Peripherals and Distribution Limited	2.38	2.53	2.48	2.67	1.71	2.35	0.33
AVG	0.55	0.61	0.79	0.76	0.56	**0.66**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Considering the above results Suyog Telematics Ltd.is having maximum standard deviation of 0.20. Among the individual companies which had less long-term debt include DRA consultant ltd ,Mitcon consultancy & engineering service ltd. Comfort common trade ltd, Jupitor Info Media ltd are zero debt companies which depicts Small and Medium Companies mostly operated on its own fund.

Creative Peripherals & distribution ltd. has an average 2.35 times which is higher than the aggregate 0.66,this is due to higher amount of short borrowings.

The debt equity ratio did not exceed the standard norm of one: one time in the years of the study period. On an average, it recorded at 0.66 times From the creditor's point of view, the long-term financial position was fairly satisfactory.

Figure-6.14 Average Debt Equity Ratioof Selected SMEs during the study period from 2010-11 to 2014-15
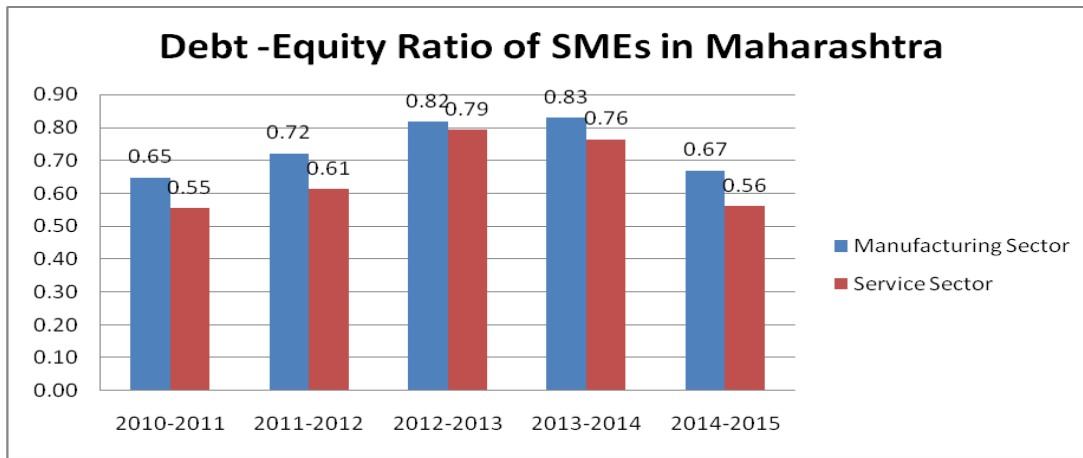
It further suggests that the SMEs successfully adopted the policy of trading on equity, which resulted into higher return on equity. In other words, SMEs were trying to increase the profits with the use of less cost of source of funds. In other words, the industry did not follow a uniform policy of raising funds from borrowing end net worth. In the same way, the debt equity ratio was not consistent due to changes in the debt and equity capital proportions. From the creditor's point of view, the long-term financial strength was poor. Service sector in SMEs more dependent on own funds than borrowed funds, service sector is between 0.55 to 0.79 and manufacturing sector is between 0.65to 0.82 .The ability to pay off its fixed interest commitments was very sound.

6.4.2 Proprietary Ratio

 Proprietary ratio establishes the relationship between shareholders' funds and the total assets of the firm. The higher ratio of the share indicates better long-term solvency position. This ratio indicates the extent to which the assets of the company can be invested without affecting the interest of the creditor.

Table - 6.4.2 :   A) Proprietary Ratio of Manufacturing Sector

(In terms of percent)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	27%	24%	21%	20%	26%	24%	0.03
Filtra consultants & engineers ltd	24%	32%	55%	42%	55%	42%	0.12
Ganga pharmaceuticals ltd	48%	49%	54%	51%	46%	49%	0.03
valiant organic ltd	59%	54%	50%	54%	56%	54%	0.03
Patdiam jewellery ltd	49%	54%	49%	46%	50%	50%	0.03
AVG	41%	42%	46%	43%	46%	**44%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Proprietary Ratio indicates the amount which is invested by the proprietors, partners or the shareholders together with the ploughed back profits. In this company the ratio is increasing every year which indicates that company is less dependent on outside funds. The maximum average percentage of shareholders fund in total assets is 54%. Proprietary Ratio indicates the use of shareholders funds and it is seen that in some year it has been decreasing and in some years it is increasing which indicates that in the year it has been decreasing, the use of owned funds is more compared to borrowed funds.

In Bajaj Health care ltd proprietary ratio was registered fluctuating trend and ranged from 21% in the year 2012-2013 to 28% in the year 2010-2011 during the study period.

Above table showed that the mean proprietary ratio of Valiant Organic Ltd. was 0.54 which is statistically significant.

The SMEs viz. Filtra Consultant & Engineering ltd,Ganga pharmaceutical ltd,Valiant organic ltd,Patadiam Jewellery ltd is nearby the average mean of manufacturing sector i.e 44%.only Bajaj Health care ltd shows the lower shareholder fund out of total assets of 24% as this SME is trading on borrowed fund .

Grand mean of SMEs is 44%,All sample units are very close to aggregate mean except Bajaj Healthcare ltd.

The analysis of financial structure of SMEs points out that SMEs industry in the state has, more or less, depend on both internal and external sources, but more upon on internal sources.

Table - 6.4.2 : B) Proprietary Ratio of Service Sector   (In terms of percent)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	67%	48%	62%	69%	72%	64%	0.09
Suyog Telematics ltd	31%	42%	29%	40%	53%	39%	0.09
Comfort Commotrade ltd	75%	24%	21%	23%	25%	34%	0.21
Jupiter info media ltd	87%	90%	98%	91%	97%	93%	0.04
Cawasji Behramji Catering services Ltd	33%	24%	24%	23%	22%	25%	0.04
Mitcon Consultancy & Engineering Services Ltd	79%	85%	86%	90%	90%	86%	0.04
Creative Peripherals and Distribution Limited	24%	22%	23%	24%	30%	25%	0.03
AVG	57%	48%	49%	51%	56%	**52%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

It can also be concluded that over the course of 5 years of study period from 2010-11 to 2014-15, the Proprietary Ratio has increased. The Proprietary Ratio is positive or more than 50% during whole study period which indicates utmost dependence on inside sources of fund in financing total assets. Mitcon Consultant and distribution ltd have financed its total assets with own funds with on an average of 86 percent.

Figure-6.15 Average Proprietary Ratioof Selected SMEs during the study period from 2010-11 to 2014-15
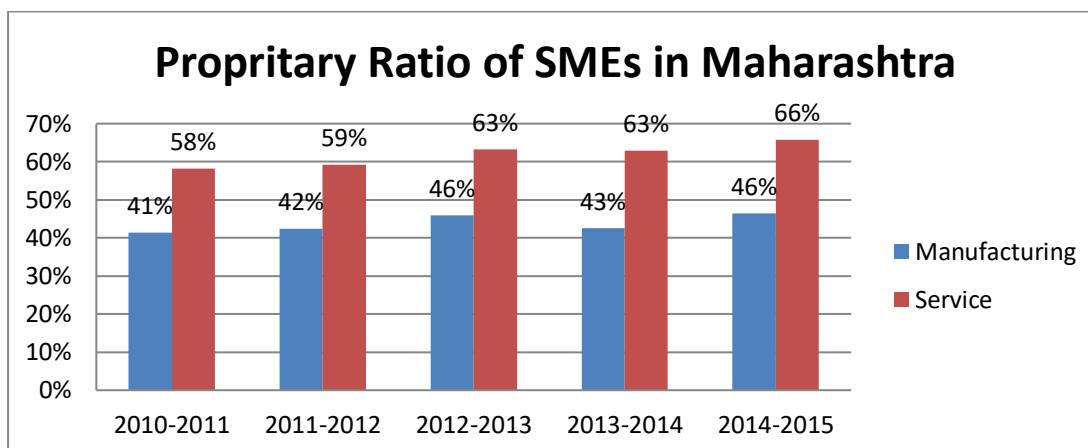
Source – Computed

Proprietary ratio was registered fluctuating trend. In manufacturing sector SMEs have a range from 41% to 46% and Service sector SMEs have a range between 50% to 60% during the study period. This indicates shareholders funds are safe or riskless as more assets compare to their share in the SME.

6.4.3 Total Debt to Total Asset

This ratio indicates the entire financial structure of the business, divided between equity and total outside liabilities. It is calculated by dividing Total debt by Total Asset.

Table - 6.4.3 :A ） Total Debt to Total asset in Manufacturing sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	40.17%	43.53%	48.59%	43.40%	40.89%	43.32%	3%
Filtra consultants & engineers ltd	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Ganga pharmaceuticals ltd	44.18%	42.29%	34.29%	40.27%	39.78%	40.16%	3%
valiant organic ltd	7.65%	8.37%	13.42%	19.46%	2.38%	10.26%	6%
Patdiam jewellery ltd	35.06%	40.59%	44.03%	39.60%	41.75%	40.21%	3%
AVG	25.41%	26.96%	28.06%	28.55%	24.96%	**26.79%**	

Source: - compiled from annual report of companies.

Bajaj health care ltd has increasing trend with the average of 43.32 percent. Ganga pharmaceutical ltd has average 40.16 percent only in case of Valiant organic ltd erratic and fluctuating as it indicates short term funds are utilise and repaid frequently. Patadiam jewellery ltd has average of 40.21 percent. This table indicates that assets of SMES are financed maximum by own funds.

Table - 6.4.3 :B ） Total Debt to Total asset in Service sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	11.11%	3.74%	1.10%	0.76%	0.00%	3.34%	0.04
Suyog Telematics ltd	31.63%	21.39%	46.60%	40.12%	29.33%	33.81%	0.09
Comfort Commotrade ltd	0.00%	0.00%	0.32%	0.00%	1.45%	0.35%	0.01
Jupiter info media ltd	0.00%	0.00%	0.79%	7.37%	1.87%	2.00%	0.03
Cawasji Behramji Catering services Ltd	10.93%	28.43%	34.57%	36.33%	36.24%	29.30%	0.10
Mitcon Consultancy & Engineering Services Ltd	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00
Creative Peripherals and Distribution Limited	57.53%	56.49%	57.09%	63.82%	50.59%	57.10%	0.04
AVG	15.89%	15.72%	20.07%	21.20%	17.07%	**17.99%**	

Source: - compiled from annual report of companies.

Creative Peripherals and Distribution ltd has the highest total debt to Equity ratio i.e 57.10 percent followed by Suyog telematics ltd 33.81 percent,Cawasji Behrtamji Catering services ltd i.e. 29.30 percent.DRA consultant ltd has decreasing trend 11.11 percent in 2010-2011 and zero in 2014-2015.Jupitor info media ltd has low average ratio of 2 percent.

Figure-6.16 Average Total Debt Asset ratioof Selected SMEs during the study period from 2010-11 to 2014-15
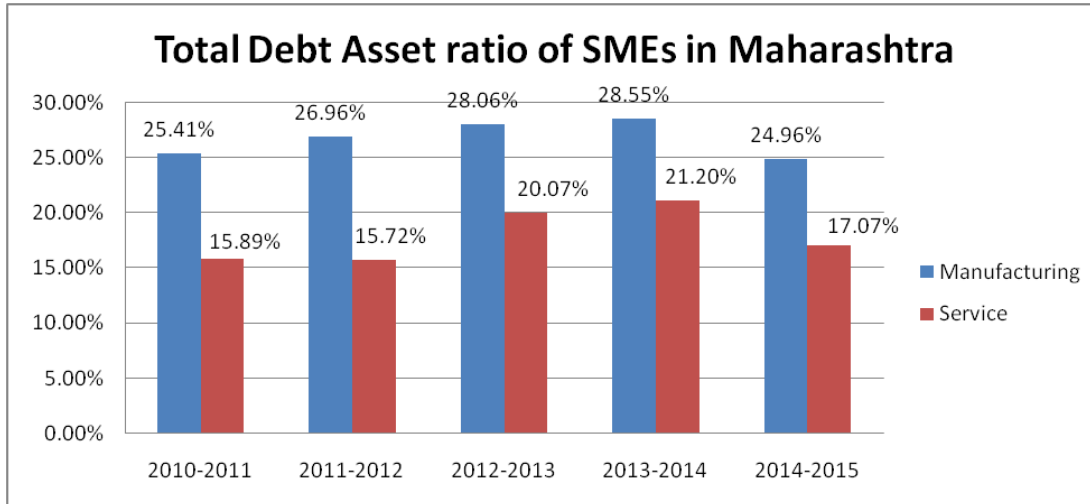
Source – *Computed*

Total debt to asset ratio in manufacturing sector is higher than the Service sector.

As this ratio is higher in capital intensive industry than low capital intensive industry unit. Manufacturing SMEs have range of 24 percent to 29 percent wherein Service Sector range is in between the 15 percent to 21 percent.

6.5   ANALYSIS OF PROFITABILITY OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

Profitability is an indication of the efficiency with which the operations of the enterprise are carried on. Poor operational performance may indicate poor sales and hence poor profits. A lower profitability may arise due to the lack of control over a expenses. In accountancy, profitability may be described as a yard-stick of the enterprise performance and indicates

public acceptance of the products. It is a relative concept which regulates and controls management policy and decision. In the words of Weston and Brigham, "Profitability is the net result of a large number of polices and decisions." The profitability ratios show the combined effects of liquidity, assets management and debt management on operating results.

6.5.1   Net Profit Ratio

Table - 6.5.1 :A) Net Profit Ratio of SMEs in Manufacturing Sector

| | | | | | | (In terms of percentage) | |
Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	3.73%	7.53%	5.24%	5.84%	3.44%	5.16%	1.49%
Filtra consultants & engineers ltd	9.16%	4.36%	4.81%	2.15%	3.60%	4.82%	2.35%
Ganga pharmaceuticals ltd	0.15%	0.96%	1.13%	1.12%	1.24%	0.92%	0.40%
valiant organic ltd	11.99%	11.84%	13.04%	12.32%	19.78%	13.79%	3.02%
Patdiam jewellery ltd	1.99%	2.81%	2.76%	2.17%	0.97%	2.14%	0.67%
AVG	5.40%	5.50%	5.40%	4.72%	5.81%	**5.37%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

As observed from the table that the Net Profit Margin of Bajaj Healthcare has highest net profit ratio in the year 2014-15 i.e.5.84 percent and lowest in the year 2012-2013 which is 3.73 percent. The results show that Net profit of Bajaj Healthcare is increasing year after year.

The point to be noted here is that all selected SMEs having all positive values of Net Profit Margin in all the years.It shows fluctuation trend during study period. The Net Profit Ratio of Filtra consultant & engineers ltd shows up and down trends in every year. The average ratio of Ganga pharmaceuticals ltd was 2%, which is less than the average ratio of sampled units. So company is performing low. Vailant organic ltd, The average ratio of this company was 21%, which is more than the average ratio of sampled companies. So company is doing better than average.

The average net profit ratio of all manufacturing Selected SMEs are ranging between 2% to 46.09%, only Bajaj Healthcare ltd shows the highest net profit margin so we can say that the company is performing well and growing.

Table - 6.5.1 : B) Net Profit Ratio of SMEs in Service Sector

(in terms of percentage)

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	14.10%	14.14%	13.62%	12.29%	12.90%	13.41%	0.72%
Suyog Telematics ltd	11.64%	8.04%	11.20%	7.91%	15.54%	10.87%	2.80%
Comfort Commotrade ltd	3.28%	7.94%	7.67%	21.12%	25.33%	13.07%	8.56%
Jupiter info media ltd	6.30%	3.14%	15.09%	11.28%	31.21%	13.40%	9.80%
Cawasji Behramji Catering services Ltd	2.96%	5.02%	4.24%	3.05%	1.30%	3.32%	1.27%
Mitcon Consultancy & Engineering Services Ltd	20.01%	21.25%	17.51%	12.38%	10.25%	16.28%	4.28%
Creative Peripherals and Distribution Limited	0.43%	0.71%	1.13%	0.41%	0.34%	0.61%	0.29%
AVG	8.39%	8.61%	10.07%	9.78%	13.84%	**10.14%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

DRA Consultant Pvt ltd, the Net Profit Ratio of shows fluctuation trend during study period. It is ranged between 33.5% in the year 2010-2011 to 19.20% in the year 2014-15 .The average ratio of this company was 22.40%, which is more than the average ratio 19.51% of sampled companies. So company is doing better than average.

Creative Peripherals has the minimum average profit ratio i.e. 11.43% which is below the average of 19.51% and Mitcon Consultancy & Engineering service Ltd has maximum average net profit ratio i.e.23.39%.

Comfort common trade shows extreme results as there is other income added to the profits of the company due to high amount of other income this ratio is shows the highest side of normal range. This is peculiarity of Service sector SME that it is showing the fluctuations. Comfort common trade ltd. has inconsistency over study period with highest standard deviations of 12.89%.

This table depicts , average Net profit ratio of SMEs in manufacturing sector range between 11% to 23% . Fluctuating trend in mean Net profit margin ratios of selected SME units of Maharashtra sample units has been observed during the entire study period

Figure-6.17 Average Net Profit ratio of Selected SMEs during the study period from 2010-11 to 2014-15
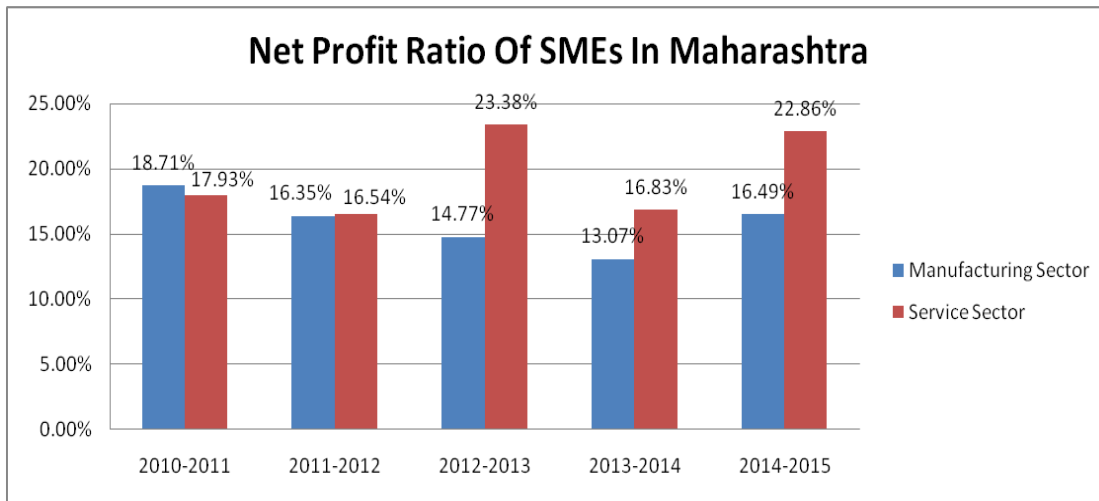
Source – Computed

Fluctuating trend in mean Net profit margin ratios of selected SME units of Maharashtra sample units has been observed during the entire study period. The range between service sector SMEs and manufacturing sector is approximately a similar trend 16% to 24%.

6.5.2 Return on Capital Employed

"The term Return on Investment (ROCE) refers to an additional sum of money expected from an investment over and above the original investment, the return may be before or after tax. Investment refers to commitment of economic resource such as money, machinery and equipment, manpower etc.; with an expectation of producing a gain either in the form of income, appreciated value, greater efficiency or cost savings."[104]

Table -6.5.2 : A)Return on Capital employed   Of SMEs in Manufacturing Sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	24.12%	12.00%	10.33%	22.88%	32.60%	20.39%	8%
Filtra consultants & engineers ltd	76.26%	76.59%	49.90%	22.63%	25.11%	50.10%	24%
Ganga pharmaceuticals ltd	11.91%	8.54%	8.75%	8.33%	9.51%	9.41%	1%
valiant organic ltd	31.17%	34.31%	35.05%	39.17%	47.05%	37.35%	5%
Patdiam jewellery ltd	13.54%	10.86%	11.93%	12.07%	13.23%	12.33%	1%
AVG	31.40%	28.46%	23.19%	21.02%	25.50%	**25.91%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

It is found that the highest Return on Capital Employed is reported by Filtra Consultant & engineers Ltd. and Valiant Organic Ltd. enterprises of the selected SME units of Maharashtra during study Period where as Ganga Pharamceutical ltd and Patadiam jewellery Ltd showed lowest Return on Capital Employed during these Periods. Fluctuating trend in mean Return on Capital Employed ratios of SME units of Maharashtra has been observed during the entire study period. The mean unit of Return on Capital Employed of Small and Medium units, in highest year wise mean 31.4 in year 2010-11, and lowest 23.2% in year 2012-13 in study period.

Table - 6.5.2 : B)Return on Capital employed   Of SMEs in Manufacturing Sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	43.44%	49.10%	31.60%	25.75%	35.72%	37.12%	8%
Suyog Telematics ltd	29.39%	27.92%	50.98%	20.68%	22.88%	30.37%	11%
Comfort Commotrade ltd	7.23%	24.36%	9.42%	24.20%	34.06%	19.86%	10%
Jupiter info media ltd	4.11%	1.47%	1.48%	1.27%	1.66%	2.00%	1%
Cawasji Behramji Catering services Ltd	39.44%	74.74%	57.05%	53.16%	32.36%	51.35%	15%
Mitcon Consultancy & Engineering Services Ltd	33.59%	24.94%	12.43%	9.09%	7.59%	17.53%	10%
Creative Peripherals and Distribution Limited	23.48%	33.41%	37.99%	27.39%	34.51%	31.36%	5%
AVG	25.81%	33.71%	28.71%	23.08%	24.11%	**27.08%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

DRA Consultant pvt ltd has the highest average ratio of 37.12 percent,the trend shows fluctuation and inconsistency. Suyog Telematics ltd has high ratio 30.37 percent return on capital employed .Comfort commotrade ltd has shown exorbitant growth over study period from 7 percent in 2010-2011 to 34 percent in 2014-2015, this is a positive sign and also reveals this unit is performing very well during study period. The least return on capital employed is reported by Jupiter infomedia ltd.Cawasji Behramji catering is the best performing SME among the selected samples. The trend of Mitcon Consultancy & Engineering ltd reveals decreasing profits the reason can be In recent years the decline in EBIT was more than the decline in assets, This indicates that the Mitcon Consultancy ltd has

not been designing its investment policy depending upon its capacity to earn profits. .Creative Peripherals and distribution ltd has the average ratio of 31.36 percent.

Figure-6.18 Average Return on Capital Employed ratio of Selected SMEs during the study period from 2010-11 to 2014-15
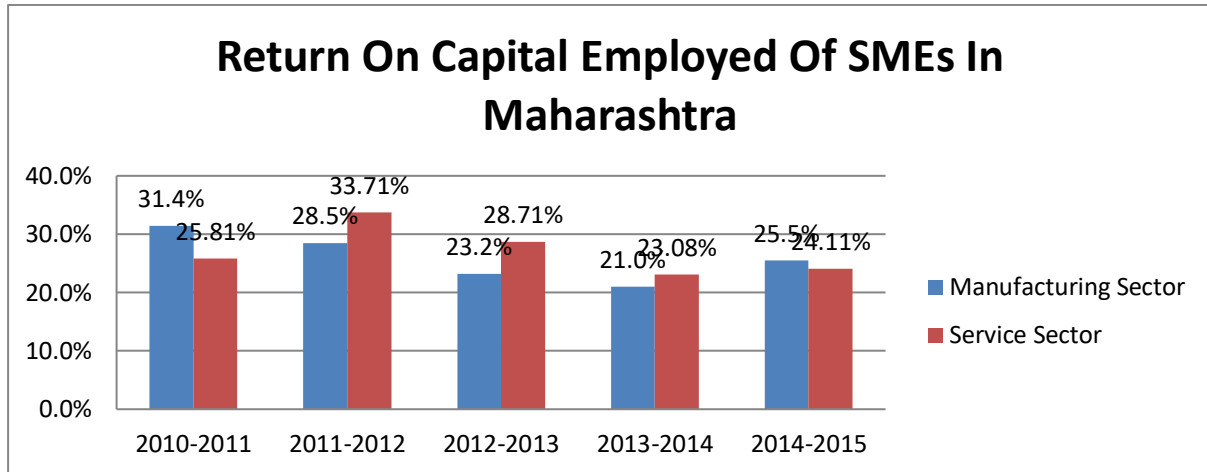
Source – Computed

Return on Capital employed of SMEs in Manufacturing Sector is in the range of 21 percent to 31.4 percent .SMEs in service sector is in the range of 23 percent to 33.71 percent. Overall SMEs shows erratic and negative trend.

6.5.3 Return on Asset Ratio

Table - 6.5.3:A) Return on Asset of SMEs in Manufacturing Sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	4.32%	8.77%	6.83%	8.23%	5.15%	6.66%	2%
Filtra consultants & engineers ltd	14.93%	15.69%	18.36%	5.96%	9.27%	12.84%	5%
Ganga pharmaceuticals ltd	0.06%	0.42%	0.55%	0.58%	0.62%	0.45%	0%
valiant organic ltd	14.91%	14.58%	14.80%	18.34%	25.28%	17.58%	4%
Patdiam jewellery ltd	2.11%	1.87%	1.78%	1.46%	1.03%	1.65%	0%
AVG	7.27%	8.26%	8.46%	6.91%	8.27%	**7.84%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Table 6.5.2 reveals that the percentage of EBIT to Assets (ROA) in respect of the SMEs in Manufacturing sector varied between 0.45 percent and 17.58 percent during the study period. This indicates that there was an fluctuating trend in the ROA ,this speaks of ineffective utilization of total assets. Valiant organic ltd has the highest ratio 17.58 percent

followed by Filtra consultant & engineers ltd 12.84 percent .Bajaj healthcare ltd ,Patdiam jewellery ,Ganga pharmaceutical have low return on asset.

Table - 6.5.3:B) Return on Asset of SMEs in Service Sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	22.15%	16.18%	12.98%	11.09%	15.68%	15.61%	3.76%
Suyog Telematics ltd	5.78%	7.20%	5.12%	3.49%	7.84%	5.88%	1.54%
Comfort Commotrade ltd	3.60%	3.89%	0.99%	4.08%	6.51%	3.81%	1.75%
Jupiter info media ltd	2.36%	0.90%	1.47%	0.91%	1.14%	1.36%	0.54%
Cawasji Behramji Catering services Ltd	7.25%	9.85%	8.12%	5.19%	1.74%	6.43%	2.78%
Mitcon Consultancy & Engineering Services Ltd	21.19%	16.99%	7.86%	6.06%	6.38%	11.69%	6.21%
Creative Peripherals and Distribution Limited	2.18%	2.97%	4.36%	2.02%	1.93%	2.69%	0.91%
AVG	9.22%	8.28%	5.84%	4.69%	5.89%	**6.78%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

Return on asset in DRA consultant is high compare to remaining selected SMEs i.e.15.61 percent ,followed by Mitcon Consultancy & Engineering ltd 11.69 percent.Cawasji Behramji catering services ltd indicates decreasing trend which shows inefficient use of assets .Manufacturing units shows the higher increase of fixed asset compare to net profit .Jupitor infomedia ltd has the lowest average ratio 1.36 percent.

Figure 6.19 : Return on Asset of SMEs in Maharashtra
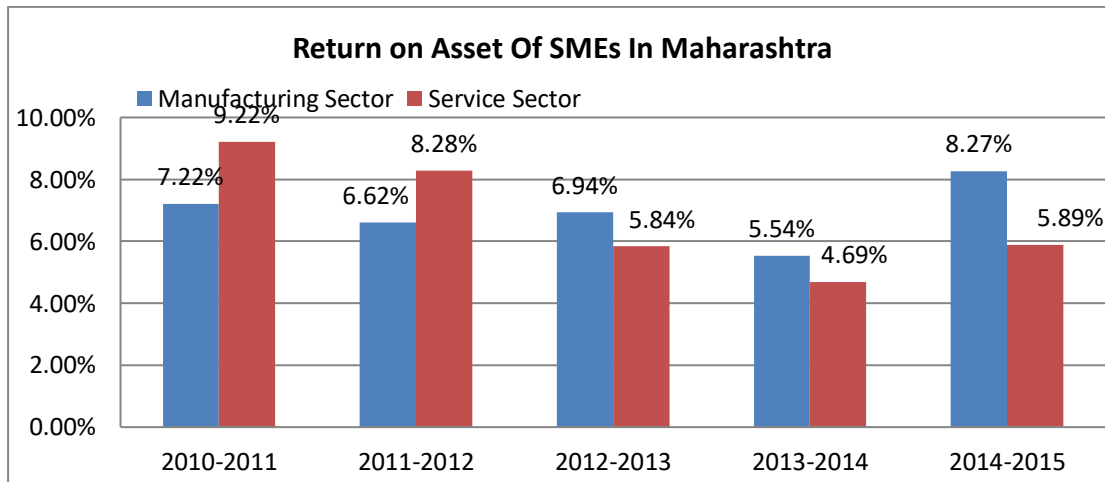
Source – Computed

The return on asset analysis conducted in the study reveals that Manufacturing sector SMEs have shown the Downbeat tendency during 2013-2014 and then has shown the positive trend in the performance of profitability ratios during 2014-15 .Service sector SMEs shows the negative trend which is the area of concern and increase of sales or effective utilisation of asset plans should be implemented in SMEs viz. Jupitor infomedia and DRA consultant.

6.5.4 Return on Net Worth

Table - 6.5.4 : A) Return on Net Worth of SMEs Manufacturing Sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
Bajaj Healthcare Ltd	20.76%	38.26%	30.43%	44.59%	32.20%	33.25%	8%
Filtra consultants & engineers ltd	76.26%	76.59%	49.90%	22.63%	25.11%	50.10%	24%
Ganga pharmaceuticals ltd	47.59%	47.98%	40.33%	40.08%	42.70%	43.74%	3%
valiant organic ltd	38.46%	40.64%	43.98%	51.10%	69.23%	48.68%	11%
Patdiam jewellery ltd	5.28%	4.30%	4.31%	3.83%	5.06%	4.55%	1%
AVG	37.67%	41.55%	33.79%	32.45%	34.86%	**36.06%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

During the study period of this industry the highest Average ratio was 50.10 % of Filtra consultant ltd with the highest deviation of 24 percent and lowest ratio was 4.55% of Patdiam jewellery ltd with constant performance over the study period. Patdiam jewellery ltd reveals the weak condition of rate of return on total assets ratio compared with other SMEs . When rate of return on total assets ratio may be highest condition per year it is better situation of SMEs. Except Patdiam jewellery ltd all other manufacturing SMEs earning are in the range of 30 percent to 50 percent .

Table - 6.5.4: B) Return on Net Worth of SMEs Service Sector

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG	STDEV
DRA Consultants Pvt Ltd	35.67%	19.86%	17.23%	35.19%	53.35%	32.26%	13%
Suyog Telematics ltd	76.26%	76.59%	49.90%	22.63%	25.11%	50.10%	24%
Comfort Commotrade ltd	14.70%	15.38%	14.32%	13.11%	15.45%	14.59%	1%
Jupiter info media ltd	40.75%	43.20%	47.13%	53.98%	71.37%	51.29%	11%
Cawasji Behramji Catering services Ltd	13.54%	10.86%	11.93%	12.07%	13.23%	12.33%	1%
Mitcon Consultancy & Engineering Services Ltd	29.80%	23.56%	24.26%	31.79%	43.69%	30.62%	7%
Creative Peripherals and Distribution Limited	33.73%	21.70%	27.97%	43.21%	64.37%	38.20%	15%
AVG	34.92%	30.16%	27.54%	30.28%	40.94%	**32.77%**	

Source: Compiled and computed from the published annual reports of the selected SMEs in Maharashtra

A medium good condition of rate of return on total assets ratio is indicated in table but rate of return on total assets ratio is first decreased and increased every year. Suyog Telematics ltd and Jupitor infomedia ltd have the high return on net worth 50.10 percent and 51.29 percent respectively.DRA Consultant Pvt Ltd , Mitcon consultancy & engineering service ltd &,Creative peripherals & Distribution ltd has a range of similar ratio 32.26 percent,30.62 percent and 38.20 percent respectively. Comfort commotrade ltd and Cawasji Behramji catering service ltd has the lower range of return on net worth ratio i.e 12.33 percent and 12.33 percent respectively.

Figure 6.20 : Return on Net Worth of SMEs in Maharashtra

Return On Net worth Of SMEs In Maharashtra
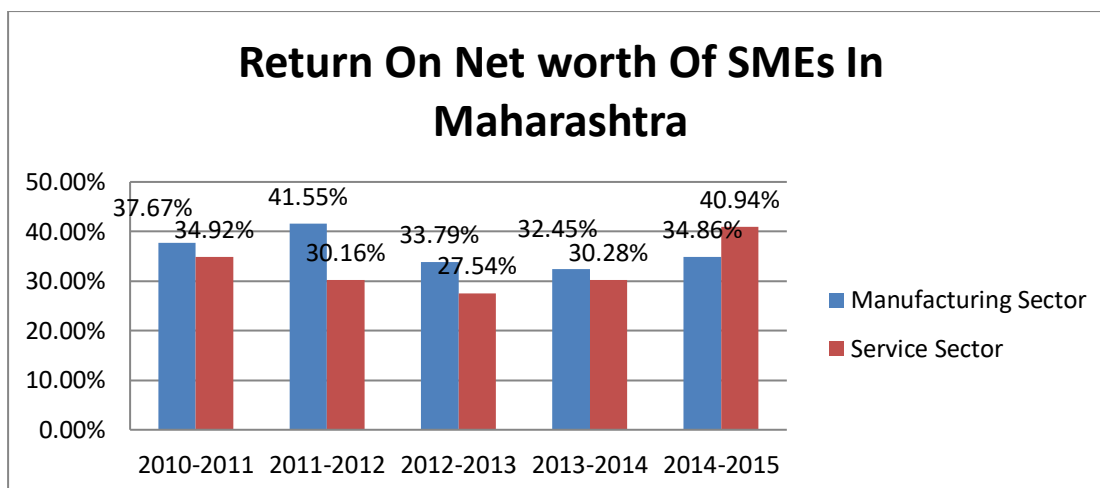
Source – Computed

Return on net worth of SMEs are fluctuating .as the average ratio is more than minimum 27.54 percent in service sector and 32.45 percent in Manufacturing sector. This indicates the SMEs have good opportunity of growth .

6.6   FIXED ASSET UTILISATION INDEX

In an enterprise, fixed asset must be employed in the same quantum of sales. Fixed asset Index assist in understanding the efficiency of an business in optimum utilization of fixed assets. One of the most important tools employed to evaluate the effectiveness of the utilization of fixed assets is assets index.[105] Fixed asset turnover means the number of times an asset flows through a firm's operations into sales. The turnover of fixed assets investment is defined as the relationship between the volume of business done and the amount of capital tied-up in fixed property investments[106]. In order to analyse the utilization of fixed assets, the utilization index for the fixed assets has been worked out as under

$$UI_{FA} = \frac{S_t}{S_{t-1}} \times \frac{FA_{t-1}}{FA_t}$$

Where UI_{FA} – Utilization Index (Fixed Assets)

S_t – Sales revenue at period 't'

S_{t-1} – Sales revenue at (t–1) period

FA_t – Fixed assets at period 't'

FA_{t-1} – Fixed assets at (t–1) period

A value of UIFa > 1 indicates in the matter of utilization of fixed assets of the company. The higher the value of the index, the greater is the degree of efficiency in this regard and vice-versa.

Table - 6.6 : A) Fixed Asset Index of Manufacturing Sector

Name/Financial year	2011-2012	2012-2013	2013-2014	2014-2015	AVG
Bajaj Healthcare Ltd	0.89	1.03	1.16	0.91	1.00
Filtra consultants & engineers ltd	3.30	0.21	1.40	1.09	1.50
Ganga pharmaceuticals ltd	1.10	0.96	1.17	1.01	1.06
valiant organic ltd	1.02	1.11	1.40	0.79	1.08
Patdiam jewellery ltd	0.58	1.21	1.26	1.84	1.22
AVG	1.38	0.90	1.28	1.13	**1.17**

Sources-Computed

The efficiency in the utilization of fixed assets varies from 0.89 in 2011-12 to 091 in 2014-15 whereas the average utilization index in the Bajaj healthcare ltd is 1.00. In the Filtra consultant & engineers ltd , the utilization index fluctuates highly from 3.30 in 2011-12 to 1.40 in 2014-15 whereas the average utilization index in the Filtra consultant & engineers ltd is 1.50. The utilization index in Patdiam jewellery ltd increases from 0.58 in 2011-12 to 1.84 in 2014-15 and

Valiant Organic ltd Fixed asset index declines to 0.79 in 2014-15 whereas the average utilization index of fixed assets is 1.08.All selected sample manufacturing SMEs reflects effective utilisation as it is higher than 1.

Table - 6.6 : B) Fixed assets utilisation index of Service Sector

(Values in times)

Name/Financial year	2011-2012	2012-2013	2013-2014	2014-2015	AVG
DRA Consultants Pvt Ltd	1.09	0.98	1.13	1.66	1.21
Suyog Telematics ltd	1.16	0.34	0.59	0.96	0.76
Comfort Commotrade ltd	0.84	0.29	2.44	1.41	1.25
Jupiter info media ltd	1.00	0.99	0.31	0.15	0.61
Cawasji Behramji Catering services Ltd	1.32	1.45	1.28	0.68	1.18
Mitcon Consultancy & Engineering Services Ltd	0.89	0.71	0.85	1.13	0.90
Creative Peripherals and Distribution Limited	0.82	1.23	1.75	1.56	1.34
AVG	1.01	0.86	1.19	1.08	1.04

All the service sector SMEs are effectively utilising its fixed assets comparing to its sales except Suyog Telematics ltd and Jupitor info Media ltd which shows the average fixed asset index 0.76 and 0.61 respectively .This is due to both the SMEs have invested in fixed asset exorbitantly .

DRA Consultant Pvt.Ltd. depicts fluctuation in fixed asset index 1.09 in the year 2011-12 to 1.66 in 2014-15 whereas the average index is 1.21.

6.7   SPRINGATE MODEL

The Springate model was introduced by Gordon L V Springate in 1978. It's a revolution of the Altman Model (1968). It initially used 19 financial ratios to predict companies under financial distress. "After testing, Springate finally chose four financial ratios to be used to determine whether a company is said to be either healthy or potentially insolvent. Springate test shows the model has an accuracy of 92.5% Many researchers have used this model during various time frames and in various countries and have tested the accuracy of predicting the bankruptcy of companies in future and have found the accuracy to be more than 85%."[107]

Springate continued Altman studies and the use of audit analytics for selecting 4appropriate financial ratios, which was included working capital to total assets, profit before interest and taxes to total assets, profit before tax to current debt, sale to total assets among the 19 ratio, which had the best ratio to identify healthy and bankrupt companies and after its tests, provided a model in 40 companies, which achieved to 92.5 percent correct predictions.

"For most of the bankrupt companies models predicted bankruptcy even four years before the actual bankruptcy occurring. There are some variations in accuracy of different models. The model that shows the best results when predicting the bankruptcy is Springate."[108]

It can be used as an early warning system to test the bankruptcy of companies in future. The formula for the model is given below:

$Z = 1.03X_1 + 3.07X_2 + 0.66X_3 + 0.4 X_4$ where $X_1 =$ working capital/total assets

$$X_2 = \text{PBIT/Total assets}$$

$$X_3 = \text{PBIT/ Current liabilities}$$

$$X_4 = \text{Sales/ Total assets}$$

$Z < 0.862$ indicates possibility of bankruptcy.

The analysis for testing insolvency was done on all SMEs of manufacturing and Service Sector using the Springate Model. The four variables were computed year wise and then applying the formula above the Z score of all the companies was computed. Following were the Z scores:

Table - 6.7 : A)Comparative table 0f Z score analysis of Sample SMEs in Manufacturing Sector of Maharashtra

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG
Bajaj Healthcare Ltd	0.727	0.613	0.602	0.771	1.035	0.750
Filtra consultants & engineers ltd	1.553	2.607	3.121	1.873	1.910	2.213
Ganga pharmaceuticals ltd	0.473	0.775	0.785	0.670	0.651	0.671
Valiant organic ltd	2.045	1.716	1.701	2.275	3.390	2.225
Patdiam jewellery ltd	1.015	0.877	0.863	0.863	1.060	0.936

Source – Computed

Bajaj Healthcare ltd has average score of 0.750 which is below the standard score of 0.862,it approximately near the borderline of score. It is showing improving trend over the study period. Filtra consultant ltd is above the score in all the years of study period. Ganga pharmaceutical ltd is also showing the improving trend. Valiant organic ltd is greater than the

Score in the study period. Patdiam jewellery ltd is also has average 0.936 , higher than the score of 0.862 .

Table - 6.7 : B)Comparative table 0f Z score analysis of Sample SMEs in Service Sector of Maharashtra

Name/Financial year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	AVG
DRA Consultants Pvt Ltd	2.689	1.800	1.710	1.662	1.937	1.959
Suyog Telematics ltd	0.652	0.750	0.286	0.333	0.991	0.603
Comfort Commotrade ltd	1.242	1.233	0.248	0.784	0.899	0.881
Jupiter info media ltd	0.498	0.308	0.588	0.095	0.272	0.352
Cawasji Behramji Catering services Ltd	1.498	1.558	1.443	1.283	0.908	1.338
Mitcon Consultancy & Engineering Services Ltd	3.524	3.428	2.133	2.398	1.736	2.644
Creative Peripherals and Distribution Limited	2.617	2.272	2.191	2.518	3.061	2.532

Source – Computed

DRA Consultant pvt ltd ,Cawasji Behramji catering services ltd ,Mitcon consultancy & engineering ltd,Creative Peripherals and distribution ltd have the higher than the score i.e 1.959,1.338,2.644,2.532 respectively. Suyog Telematics ltd , Jupitor info media ltd have the lower than score ,it also shows the improving trend over the study period.

Statistical Analysis

6.8   TESTING OF HYPOTHESIS USING KRUSKAL-WALLIS TEST

"Kruskal Wallis (KW) test is the non parametric equivalent to the omnibus F test in a one way ANOVA (which is used with matrix dependent variable). KW test is used when the dependent variable consist of ranks. It tests the null hypothesis that the location of each group is the same in the population. If the null hypothesis is rejected, then at least one of the locations is different from the others."[109] "When the KW test is significant, perform follow up pair wise tests. It is a non-parametric test, an alternative to One way ANOVA, when the normality assumption fails to conduct parametric tests."[110]

6.8.1 Testing of Hypothesis using Kruskal-Wallis Test of SMEs of Manufacturing Sector

Solvency position in Manufacturing sector

Table - 6.8.1 :A)Fixed asset to long term funds Ratio

Comparison of average Fixed asset to long term funds ratio across SMEs of manufacturing sector in Maharashtra during the years 2010-11 to 2015-16.				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	1.049	0.158	23	Value 21.26 df 4 P value 0.00
Filtra consultants & engineers ltd	0.089	0.036	3.6	
Ganga pharmaceuticals ltd	0.166	0.028	11	
Valiant organic ltd	0.439	0.072	18	
Patdiam jewellery ltd	0.149	0.029	9.4	

Source – Computed

Ho- Average Fixed Asset to long term funds ratio across SMEs within manufacturing sector of Maharashtra are alike.

Table reflects the average fixed asset to long term funds ratio within the sample of selected manufacturing SMEs of Maharashtra. Bajaj Healthcare ltd has the highest mean 1.049 followed by Valiant organic ltd 0.439, Ganga pharmaceutical ltd 0.166,Patdiam jewellery ltd 0.149 .The lowest mean is of average Fixed asset ratio is of Filtra consultant & engineers ltd .

The significance of mean difference is tested using Kruskal Wallis test, which is a non parametric test. It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 21.26 with 4 degree of freedom.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Fixed Asset to long term funds Ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.1 :B) Debt to Asset Ratio

Comparison of average Debt to asset ratio across SMEs of manufacturing sector in Maharashtra

Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	0.128	0.022	18.8	Value 22.746
Filtra consultants & engineers ltd	0*	-	5.5	df 4
Ganga pharmaceuticals ltd	0.28	0.105	22.2	P value 0.00
Valiant organic ltd	0*	-	5.5	
Patdiam jewellery ltd	0.005	0.001	13	

Source – Computed

*Not applicable as Debt is zero

Ho- Average Debt to Asset ratio across SMEs within manufacturing sector of Maharashtra are alike.

Table reflects the Debt asset ratio within the sample of selected manufacturing SMEs of Maharashtra. Filtra consultant and Valiant organic ltd has zero debt, assets of these SMEs are funded only by own fund.

Patadiam jewellary ltd has the lowest mean 0.005 followed Bajaj healthcare ltd 0.128. Ganga pharmaceutical ltd has the highest mean 0.28 of Debt asset ratio. Ganga pharmaceutical ltd has highest deviation of 0.104.Standard deviation shows there is a fluctuation in Debt asset ratio in all sample SMEs.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a significant difference with in the sector. Test results have generated the Chi square value of 22.746 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Debt Asset Ratio of selected SMEs in Maharashtra.

Table - 6.8.1 :C)Degree of financial leverage

Comparison of Degree of financial leverage across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	1.049	.591	12.00	Value 22.590
Filtra consultants & engineers ltd	1.000	0E-7	11.00	df 4

Ganga pharmaceuticals ltd	.334	.0228	3.00	P value 0
Valiant organic ltd	1.056	.0153	16.00	
Patdiam jewellery ltd	2.726	.257	23.00	

Source – Computed

Ho- Average Degree of financial leverage across SMEs within manufacturing sector of Maharashtra are alike.

Table reflects the Degree of financial leverage within the sample of selected manufacturing SMEs of Maharashtra. Patdiam jewellery ltd has the highest mean 2.726, followed by Valiant organic ltd 1.056 , Bajaj Health Care Ltd 1.049.The lowest mean is of average Fixed asset ratio is of Ganga pharmaceuticals ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 22.590 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Degree of financial leverage across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.1 : D)Solvency position in Manufacturing sector

Comparison of solvency position across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.742	.177	18.60	Value 22.590
Filtra consultants & engineers ltd	.363	.012	8.00	df 4
Ganga pharmaceuticals ltd	.262	.030	3.00	P value 0
Valiant organic ltd	.498	.027	13.00	
Patdiam jewellery ltd	.960	.083	22.40	

Source – Computed

Ho- Average value of solvency of SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the solvency position within the sample of selected manufacturing SMEs of Maharashtra. Patdiam jewellery ltd has the highest mean 0.960, followed by Bajaj Healthcare Ltd 0.742, valiant organic ltd 0.498, filtra consultants &engineers ltd. The lowest mean of solvency, is of Ganga pharmaceutical ltd 0.261.

 The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 22.590 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average value of solvency across selected SMEs within manufacturing sector of Maharashtra.

6.8.2 Liquidity Position in Manufacturing Sector

Table - 6.8.2 : A) Current ratio

Comparison of average current ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.879	.036	3.00	Value 14.540
Filtra consultants & engineers ltd	1.608	.308	11.40	df 4
Ganga pharmaceuticals ltd	2.537	1.105	18.80	P value .006
Valiant organic ltd	2.171	.598	17.40	
Patdiam jewellery ltd	1.756	.091	14.40	

Source – Computed

Ho- Average current ratio across SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average current ratio within the sample of selected manufacturing SMEs of Maharashtra. Ganga pharmaceuticals ltd has the highest mean 2.537, followed by Valiant organic ltd 2.171 , Patdiam jewellery Ltd 1.756.The lowest mean of average current ratio is of Bajaj Healthcare ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 14.540 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Degree of financial leverage across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.2 :B) Quick Ratio

Table 6.8.2 B) Comparison of average quick ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.635	.064	3.00	Value 13.706
Filtra consultants & engineers ltd	1.136	.183	12.00	df 4
Ganga pharmaceuticals ltd	1.354	.519	15.20	P value .008
Valiant organic ltd	1.651	.561	18.80	
Patdiam jewellery ltd	1.165	.078	16.00	

Source – Computed

Ho- Average quick ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average current ratio within the sample of selected manufacturing SMEs of Maharashtra. Valiant organic ltd has the highest mean 1.651, followed by Ganga pharmaceuticals ltd 1.354, Patdiam jewellery Ltd 1.165.The lowest mean of average current ratio is of Bajaj Healthcare ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 13.706 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average current ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.2 :C) Cash to current Asset

Comparison of average cash to current asset ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.008	.005	3.60	Value 17.664
Filtra consultants & engineers ltd	.185	.014	21.20	df 4
Ganga pharmaceuticals ltd	.063	.029	13.40	P value .001
Valiant organic ltd	.116	.084	17.60	
Patdiam jewellery ltd	.037	.041	9.20	

Source – Computed

Ho- Average cash to current asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average cash to current asset ratio within the sample of selected manufacturing SMEs of Maharashtra. Filtra consultants & engineers ltd has the highest mean 0.185, followed by Valiant organic ltd 0.116, Ganga pharmaceuticals ltd 0.063. The lowest mean of average cash to current asset ratio is of Bajaj Healthcare ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 17.664 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average cash to current asset ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.2 :D) Current asset to total Asset Ratio

Comparison of Current asset to total Asset ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.543	.032	13.00	Value 21.940
Filtra consultants & engineers ltd	.941	.021	23.00	df 4
Ganga pharmaceuticals ltd	.456	.026	5.80	P value .000
Valiant organic ltd	.440	.053	5.20	
Patdiam jewellery ltd	.872	.023	18.00	

Source – Computed

Ho- Average current asset to total asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Current asset to total Assetratio within the sample of selected manufacturing SMEs of Maharashtra. Filtra consultants & engineers ltd has the highest mean 0.941, followed by Patdiam jewellery ltd 0.872, Bajaj Healthcare Ltd 0.543. The lowest mean of average Current asset to total Asset ratio is of Valiant organic ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 21.940 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Current asset to total Asset ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.2 :E) Liquid asset to Current asset ratio

Comparison of average liquid asset to current asset ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.724	.058	16.40	Value 12.805
Filtra consultants & engineers ltd	.713	.063	15.40	df 4
Ganga pharmaceuticals ltd	.549	.062	4.00	P value .012
Valiant organic ltd	.752	.072	18.80	
Patdiam jewellery ltd	.663	.022	10.40	

Source – Computed

Ho- Average current asset to total asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average liquid asset to current assetratio within the sample of selected manufacturing SMEs of Maharashtra. Valiant organic ltd has the highest mean 0.751, followed by Bajaj Healthcare Ltd 0.724, Filtra consultants & engineers Ltd 0.712. The lowest mean of average liquid asset to current asset ratio is of Ganga pharmaceuticals ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 12.805 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average liquid asset to current asset ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.2 :F) Overall Liquidity position

Comparison of average value of liquidity across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result

Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.557	.032	3.00	Value 11.911
Filtra consultants & engineers ltd	.917	.089	15.20	df 4
Ganga pharmaceuticals ltd	.992	.314	14.20	P value .018
Valiant organic ltd	1.026	.232	17.00	
Patdiam jewellery ltd	.899	.033	15.60	

Source – Computed

Ho- Average value of liquidity SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average value of liquiditywithin the sample of selected manufacturing SMEs of Maharashtra. Valiant organic ltd has the highest mean 1.026, followed by Ganga pharmaceuticals ltd 0.992, Filtra consultants & engineers ltd 0.917. The lowest mean of average value of liquidity is of Bajaj Healthcare Ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 11.911 with the degree of freedom 4.The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.This table reflects that there exists a significant difference between the average value of liquidity across selected SMEs within manufacturing sector of Maharashtra.

6.8.3 Working Capital Position in Manufacturing Sector

Table - 6.8.3 :A) Working capital Turnover ratio

Table 6.8.3 A) Comparison of average Working capital Turnover ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	-19.791665	12.2420782	3.00	Value 21.305
Filtra consultants & engineers ltd	8.763153	2.5371058	22.60	df 4
Ganga pharmaceuticals ltd	2.423598	1.3783905	10.40	P value 0
Valiant organic ltd	5.921223	1.2004107	18.20	
Patdiam jewellery ltd	2.197540	.5924963	10.80	

Source – Computed

Ho- Average Working capital Turnover ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Working capital Turnover ratio within the sample of selected manufacturing SMEs of Maharashtra. Filtra consultants & engineers ltd has the highest mean 8.763, followed by Valiant organic ltd 5.921, Ganga pharmaceuticals ltd 2.423. The lowest mean of average Working capital Turnover ratio is of Bajaj Healthcare Ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 21.305 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected. This table reflects that there exists a significant difference between the average Working capital Turnover ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.3 : B) Average Sales to current asset ratio

Table 6.8.3 B) Comparison of average Sales to current asset ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	2.402136	.2068333	15.00	Value 18.617
Filtra consultants & engineers ltd	3.072460	.9769727	19.80	df 4
Ganga pharmaceuticals ltd	1.041938	.1433860	6.00	P value 0.001
Valiant organic ltd	2.939269	.5139260	19.20	
Patdiam jewellery ltd	.941071	.2492414	5.00	

Source – Computed

Ho- Average Sales to current asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Sales to current asset ratio within the sample of selected manufacturing SMEs of Maharashtra. Filtra consultants & engineers ltd has the highest mean 3.072, followed by Valiant organic ltd 2.939, Bajaj Healthcare Ltd 2.402. The lowest mean of average Sales to current asset ratio is of Patdiam jewellery ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 18.617 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Sales to current asset ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.3 : C) Debtors turnover ratio

Comparison of average Debtors turnover ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard	Mean	Chi-Square

		Deviation	Rank	Result
Bajaj Healthcare Ltd	4.100004	.3487473	14.20	Value 18.174
Filtra consultants & engineers ltd	6.950763	2.4897969	20.40	df 4
Ganga pharmaceuticals ltd	2.990798	.9890259	8.60	P value .001
Valiant organic ltd	4.902690	.5009803	18.40	
Patdiam jewellery ltd	1.538505	.3623749	3.40	

Source – Computed

Ho- Average Debtors turnover ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Debtors turnover ratio within the sample of selected manufacturing SMEs of Maharashtra. Filtra consultants & engineers ltd has the highest mean 6.951, followed by Valiant organic ltd 4.902, Bajaj Healthcare Ltd 4.100. The lowest mean of average Sales to current asset ratio is of Ganga pharmaceuticals ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 18.174 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Debtors turnover ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.3 : D) Credit strength ratio

Comparison of average Credit strength ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	2.670	.4976931	22.20	Value 19.532
Filtra consultants & engineers ltd	1.693527	.9535081	17.40	df 4
Ganga pharmaceuticals ltd	.446667	.2532940	5.80	P value 0.001
Valiant organic ltd	.406282	.1502973	5.60	
Patdiam jewellery ltd	1.007470	.1261520	14.00	

Source – Computed

Ho- Average Credit strength ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Credit strength ratio within the sample of selected manufacturing SMEs of Maharashtra. Bajaj Healthcare Ltd has the highest mean 2.670, followed by Filtra consultants & engineers ltd 1.694, Patdiam jewellery ltd 1.007. The lowest mean of average Sales to current asset ratio is of Valiant organic ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 19.532 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Credit strength ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.3 :E) Overall Working capital position in SMEs of manufacturing sector

Comparison of average Working capital across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	-2.654935	3.0460309	3.00	Value 22.058
Filtra consultants & engineers ltd	5.120	.9111138	22.80	df 4
Ganga pharmaceuticals ltd	1.725750	.3536625	11.80	P value 0
Valiant organic ltd	3.542366	.3694661	18.20	
Patdiam jewellery ltd	1.421146	.2974596	9.20	

Source – Computed

Ho- Average Working capital SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Working capital within the sample of selected manufacturing SMEs of Maharashtra. Filtra consultants & engineers ltd has the highest mean 5.120, followed by Valiant organic ltd 3.542, Ganga pharmaceuticals ltd 1.421. The lowest mean of average Sales to current asset ratio is of Bajaj Healthcare Ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 22.058 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Working capital across selected SMEs within manufacturing sector of Maharashtra.

6.8.4   Net Profit Ratio

Table - 6.8.4 : A) Net profit ratio

Comparison of average Net profit ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.051561	.0166298	16.00	Value 20.706 df 4 P value 0.01
Filtra consultants & engineers ltd	.048153	.0262681	14.40	
Ganga pharmaceuticals ltd	.009226	0044458	3.60	
Valiant organic ltd	.137937.	.0337912	23.00	
Patdiam jewellery ltd	.021417	.0074646	8.00	

Source – *Computed*

Ho- Average Net profit ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Net profit ratio within the sample of selected manufacturing SMEs of Maharashtra. Valiant organic ltd has the highest mean 0.138, followed by Bajaj Healthcare Ltd 0.0512, Filtra consultants & engineers ltd 0.048. The lowest mean of average Net profit ratio is of Valiant organic ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 20.706 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Net profit ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.4 :B) Return on capital employed

Comparison of average Return on capital employed across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.203867	.0923210	12.20	Value 18.816 df 4 P value 0
Filtra consultants & engineers ltd	.500995	.2629077	20.20	
Ganga pharmaceuticals ltd	.094098	.0146925	3.40	
Valiant organic ltd	.373489	.0612616	19.80	
Patdiam jewellery ltd	.123256	.0108102	9.40	

Source – Computed

Ho- Average Return on capital employed SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Return on capital employed within the sample of selected manufacturing SMEs of Maharashtra. Filtra consultants & engineers ltd has the highest mean 0.501, followed by Valiant organic ltd 0.373, Bajaj Healthcare Ltd 0.204. The lowest mean of average Return on capital employed is of Ganga pharmaceuticals ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 18.816 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Return on capital employed across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.4 : C) Return on assets

Comparison of average Return on assets across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.066601	.0191586	13.60	Value 21.260 df 4 P value 0.046
Filtra consultants & engineers ltd	.128415	.0507513	19.40	
Ganga pharmaceuticals ltd	.004474	.0022794	3.00	
Valiant organic ltd	.175813	.0457325	21.00	
Patdiam jewellery ltd	.016509	.0041656	8.00	

Source – Computed

Ho- Average Return on assets SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Return on assets within the sample of selected manufacturing SMEs of Maharashtra. Valiant organic ltd has the highest mean 0.176, followed by Filtra consultants & engineers ltd 0.128, Bajaj Healthcare Ltd 0.067. The lowest mean of average Return on assets is of Ganga pharmaceuticals ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 21.260 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Return on assets across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.4 :D) Return on Net worth

Comparison of average Return on Net worth across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.332496	.0892779	10.80	Value 14.348
Filtra consultants & engineers ltd	.500995	.2629077	17.00	df 4
Ganga pharmaceuticals ltd	.437359	.0383838	16.40	P value 0.046
Valiant organic ltd	.486826	.1244300	17.80	
Patdiam jewellery ltd	.045535	.0059897	3.00	

Source – Computed

Ho- Average Return on Net worth SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Return on Net worth within the sample of selected manufacturing SMEs of Maharashtra. Filtra consultants & engineers ltd has the highest mean 0.501, followed by Valiant organic ltd 0.487, Ganga pharmaceuticals ltd 0.437. The lowest mean of average Return on Net worth is of Bajaj Healthcare Ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 14.348 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Return on Net worth across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.4 : E) Return on asset ratio

Comparison of average Return on asset ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.051561	.0166298	16.00	Value 20.706
Filtra consultants & engineers ltd	.048153	.0262681	14.40	df 4
Ganga pharmaceuticals ltd	.009226	.0044458	3.60	P value 0
Valiant organic ltd	.137937	.0337912	23.00	
Patdiam jewellery ltd	.021417	.0074646	8.00	

Source – Computed

Ho- Average Return on asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Return on asset ratio within the sample of selected manufacturing SMEs of Maharashtra. Valiant organic ltd has the highest mean 0.138, followed by Bajaj Healthcare Ltd 0.0512, Filtra consultants & engineers ltd 0.048. The lowest mean of average Return on asset ratio is of Ganga pharmaceuticals ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 20.706 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Return on asset ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.4 : F) Overall Profitability

Comparison of average Profitability across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.141217	.0261559	13.80	Value 18.646
Filtra consultants & engineers ltd	.245342	.1210837	18.40	df 4
Ganga pharmaceuticals ltd	.110876	.0078481	9.20	P value 0.01
Valiant organic ltd	.262401	.0588362	20.60	
Patdiam jewellery ltd	.045627	.0029376	3.00	

Source – Computed

Ho- Average Profitability SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Profitability within the sample of selected manufacturing SMEs of Maharashtra. Valiant organic ltd has the highest mean 0.262, followed by Filtra consultants & engineers ltd 0.245, Bajaj Healthcare Ltd 0.141. The lowest mean of average Profitability is of Ganga pharmaceuticals ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 18.646 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Profitability across selected SMEs within manufacturing sector of Maharashtra.

6.8.5 Capital Structure

Table - 6.8.5 :A) Debt equity ratio

Comparison of average Debt equity ratioacross SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	1.861419	.3421715	23.00	Value 22.140
Filtra consultants & engineers ltd	0.00	0E-7	3.00	df 4
Ganga pharmaceuticals ltd	.819871	.1119717	16.00	P value 0.00
Valiant organic ltd	.191613	.1243971	8.00	
Patdiam jewellery ltd	.810460	.0779373	15.00	

Source – Computed

Ho- Average Debt equity ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Debt equity ratio within the sample of selected manufacturing SMEs of Maharashtra. Bajaj Healthcare Ltd has the highest mean 1.861, followed by Ganga pharmaceuticals ltd 0.820, Patdiam jewellery ltd 0.810. The lowest mean of average

Debt equity ratio is of Filtra consultants & engineers ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 22.140 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Debt equity ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.5 :B) Proprietary ratio

Comparison of average Proprietary ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.236747	.0285754	3.40	Value 14.156 df 4 P value 0.07
Filtra consultants & engineers ltd	.416166	.1395109	12.80	
Ganga pharmaceuticals ltd	.492912	.0311492	13.40	
Valiant organic ltd	.544541	.0326781	20.60	
Patdiam jewellery ltd	.497355	.0311981	14.80	

Source – Computed

Ho- Average Proprietary ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Proprietary ratio within the sample of selected manufacturing SMEs of Maharashtra. Valiant organic ltd has the highest mean 0.545, followed by Patdiam jewellery ltd 0.497, Ganga pharmaceuticals ltd 0.493. The lowest mean of average Proprietary ratio is of Bajaj Healthcare Ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 14.156 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Proprietary ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.5 :C) Total debt to asset ratio

Comparison of average Total debt to asset ratio across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.433173	.0330276	20.20	Value 19.282 df 4 P value 0.01
Filtra consultants & engineers ltd	.000000	0E-7	3.00	
Ganga pharmaceuticals ltd	.401632	.0372103	17.00	
Valiant organic ltd	.102559	.0646310	8.00	
Patdiam jewellery ltd	.402073	.0331619	16.80	

Source – Computed

Ho- Average Total debt to asset ratio SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average Total debt to asset ratio within the sample of selected manufacturing SMEs of Maharashtra. Bajaj Healthcare Ltd has the highest mean 0.433, followed by Patdiam jewellery ltd 0.402, Ganga pharmaceuticals ltd 0.141. The lowest mean of average Total debt to asset ratio is of Filtra consultants & engineers ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 19.282 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Total debt to asset ratio across selected SMEs within manufacturing sector of Maharashtra.

Table - 6.8.5 :D) Capital Structure

Table 6.8.5 D) Comparison of average Capital structure across SMEs of manufacturing sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
Bajaj Healthcare Ltd	.506	.070	23.00	Value 21.940 df 4 P value 0.00
Filtra consultants & engineers ltd	.083	.028	3.00	
Ganga pharmaceuticals ltd	.343	.024	15.80	
Valiant organic ltd	.168	.035	8.00	
Patdiam jewellery ltd	.342	.020	15.20	

Source – Computed

Ho- overall capital structure of SMEs within manufacturing sector of Maharashtra is alike.

Table reflects the average overall capital structure within the sample of selected manufacturing SMEs of Maharashtra. Bajaj Healthcare Ltd has the highest mean 0.506, followed by Ganga pharmaceuticals ltd 0.343. The lowest mean of average capital structure is of Filtra consultants & engineers ltd.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 21.940 with the degree of freedom 4.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average capital structure across selected SMEs within manufacturing sector of Maharashtra.

6.9   SERVICE SECTOR

6.9.1 Solvency Analysis

Table - 6.9.1 : A) Fixed Asset to long term funds Ratio of Service sector of SMEs in Maharashtra

Comparison of average Fixed asset to long term funds ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.133	.0499	13.00	Value 28.857 df P value .000
Suyog Telematics ltd	.585	.219	31.00	
Comfort Commotrade ltd	.325	.110	23.00	
Jupiter info media ltd	.033	.0222	4.40	
Cawasji Behramji Catering services Ltd	.353	.137	24.20	
Mitcon Consultancy & Engineering Services Ltd	.316	.0516	23.80	
Creative Peripherals and Distribution Limited	.0488	.0190	6.60	

Source – Computed

Ho- Average Fixed Asset to long term funds ratio across SMEs within service sector of Maharashtra are alike.

 Table reflects the average fixed asset ratio within the sample of selected service SMEs of Maharashtra. Suyog Telematics ltd has the highest mean 0.585 followed by Cawasji Behramji Catering service ltd 0.353 , Mitcon Consultancy & Engineering service ltd 0.316 ,DRA Consultancy pvt ltd0.1333 .The lowest mean is of average Fixed asset ratio is of Jupitor info Media ltd i.e 0.033 .

The significance of mean difference is tested using Kruskal Wallis test, which is a non parametric test. It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 28.857 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Fixed Asset Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.1 : B) Long term Debt to Total Asset Ratio of Service sector of SMEs in Maharashtra

Comparison of average Long term Debt to Total Asset Ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.030	.0364	19.80	Value 22.881 df 6 P value 0.001
Suyog Telematics ltd	.064	.094	18.00	
Comfort Commotrade ltd	.000*	-	7.00	
Jupiter info media ltd	.000*	-	7.00	
Cawasji Behramji Catering services Ltd	.0168	.010	18.40	
Mitcon Consultancy & Engineering Services Ltd	.058	.022	25.20	
Creative Peripherals and Distribution Limited	.105	.021	30.60	

Source – Computed

*Not applicable as long term borrowed fund is zero

Ho- Average Long Debt to Total Asset ratios across SMEs within service sector of Maharashtra are alike.

Table reflects the average Long Debt to Total Asset ratio within the sample of selected service SMEs of Maharashtra. Creative Perpherals and Distribution ltd has the highest mean 0.105 followed by Suyog Telematics ltd 0.064 ,Mitcon Consultancy & Engineering service ltd of average mean 0.058, DRA Consultancy pvt ltd 0.030, Cawasji Behramji Catering service ltd 0.0168. Jupitor info Media ltd and Comfort Commotrade ltd have zero long term Borrowed fund hence mean shows zero.

The significance of mean difference is tested using Kruskal Wallis test, which is a non parametric test. It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 22.881with the six degree of freedom.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Long term Debt to Total Asset Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.1 : C) Degree of Financial leverage of Service sector of SMEs in Maharashtra

Comparison of average Degree of Financial leverage across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	0.975	0.196	24.2	Value 21.840
Suyog Telematics ltd	1.428	0.462	26	*df - 6
Comfort Commotrade ltd	0.851	0.336	16	P value 0.001
Jupiter info media ltd	1.143	0.178	24.6	
Cawasji Behramji Catering services Ltd	0.403	0.077	8	
Mitcon Consultancy & Engineering Services Ltd	1.007	0.002	22.8	
Creative Peripherals and Distribution Limited	0.282	0.235	4.4	

Source – Computed

Ho- Average Degree of Financial leverage across SMEs within service sector of Maharashtra are alike.

Table reflects the average degree of financial leverage within the sample of selected service SMEs of Maharashtra. Suyog Telematics ltd has the highest mean 1.428 followed by Jupitor info Media ltd by 1.143, Mitcon Consultancy & Engineering service ltd of average mean 1.007, DRA Consultancy pvt ltd 0.975, Comfort Commotrade ltd 0.875 Cawasji Behramji Catering service ltd 0.403. Creative Peripherals and Distribution Limited is on least ladder with 0.282.

The significance of mean difference is tested using Kruskal Wallis test, which is a non parametric test. It is statistically proven that the mean rank of selected SMEs shows a real difference with in the service sector of SMEs. Test results have generated the Chi square value of 21.840 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average degree of leverage across selected SMEs within service sector of Maharashtra.

Table - 6.9.1 :D) Overall Solvency of Service sector of SMEs in Maharashtra

Comparison of solvency across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.380	.043	16.20	Value 25.592
Suyog Telematics ltd	.694	.235	30.60	*df - 6
Comfort Commotrade ltd	.392	.128	21.40	P value 0.00
Jupiter info media ltd	.392	.059	18.40	
Cawasji Behramji Catering services Ltd	.258	.065	8.80	
Mitcon Consultancy & Engineering Services Ltd	.460	.024	26.80	
Creative Peripherals and Distribution Limited	.145	.088	3.80	

Source – Computed

Ho- Overall solvency across SMEs within service sector of Maharashtra are alike.

Table reflects the overall solvency within the sample of selected service SMEs of Maharashtra. Suyog Telematics ltd has the highest mean 0.694 followed by Mitcon Consultancy & Engineering service ltd of average mean 0.460 .Jupitor info Media ltd and Comfort Commotrade ltd reflects the similar solvency of 0.392 .DRA Consultancy pvt ltd 0.380 and Cawasji Behramji Catering service ltd 0.258.Creative Peripherals and Distribution Limited is on least ladder with 0.145.

The significance of mean difference is tested using Kruskal Wallis test, which is a non parametric test. It is statistically proven that the mean rank of selected SMEs shows a real difference with in the service sector of SMEs. Test results have generated the Chi square value of 25.592 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average solvency across selected SMEs within service sector of Maharashtra.

6.9.2 Liquidity analysis

Table - 6.9.2 :A) Current ratio of Service sector of SMEs in Maharashtra

Comparison of average Current ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	2.306	.425	25.80	Value 23.577
Suyog Telematics ltd	.880	.398	6.00	*df - 6
Comfort Commotrade ltd	2.097	.709	23.00	P value 0.001
Jupiter info media ltd	1.626	1.054	16.80	
Cawasji Behramji Catering services Ltd	1.153	.0685	8.40	
Mitcon Consultancy & Engineering Services Ltd	3.567	1.586	30.80	
Creative Peripherals and Distribution Limited	1.419	.0712	15.20	

Source – Computed

Ho- Average Current ratio across SMEs within service sector of Maharashtra are alike.

Table reflects the average Current ratio within the sample of selected service SMEs of Maharashtra. Mitcon Consultancy & Engineering service ltd has the highest mean 3.567 followed by DRA Consultancy Pvt ltd 2.306 , Comfort Commotrade 2.097, Jupitor info Media ltd 1.626 ,Cawasji Behramji Catering service ltd 1.153, Creative Peripherals and Distribution Limited 1.419.The lowest mean is of average Current asset ratio is of Suyog Telematics ltd i.e 0.880 which is lower than the industrial ratio.

The significance of mean difference is tested using Kruskal Wallis test, which is a non parametric test. It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 23.577 with the six degree of freedom.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Current Asset Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.2 :B) Quick ratio

Comparison of average Degree of Quick ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	2.303	.425	26.00	Value 23.714
Suyog Telematics ltd	.805	.376	7.80	*df - 6
Comfort Commotrade ltd	2.097	.709	23.60	P value 0.001
Jupiter info media ltd	1.626	1.055	17.80	
Cawasji Behramji Catering services Ltd	1.065	.041	13.60	
Mitcon Consultancy & Engineering Services Ltd	3.535	1.585	30.40	
Creative Peripherals and Distribution Limited	.764	.133	6.80	

Source – Computed

Ho- Average Quick ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the average Quick ratio within the sample of selected service SMEs of Maharashtra. Mitcon Consultancy & Engineering service ltd has the highest mean 3.535 followed by DRA Consultancy Pvt ltd 2.303 , Comfort Commotrade 2.097, Jupitor info Media ltd 1.626 , Cawasji Behramji Catering service ltd 1.065, Suyog Telematics ltd 0.805 The lowest mean is of average quick ratio is of i.e 0.764 Creative Peripherals and Distribution Limited.

The significance of mean difference is tested using Kruskal Wallis test, which is a non parametric test. It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 23.714 with the six degree of freedom .

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Quick Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.2 :C) Cash to current asset

Comparison of average cash to current ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.096	.093	13.60	Value 27.082
Suyog Telematics ltd	.021	.0178	4.80	*df - 6
Comfort Commotrade ltd	1.208	1.178	30.60	P value 0.00
Jupiter info media ltd	.151	.082	20.40	
Cawasji Behramji Catering services Ltd	.075	.0364	15.20	
Mitcon Consultancy & Engineering Services Ltd	.914	.515	30.40	
Creative Peripherals and Distribution Limited	.054	.009	11.00	

Source – Computed

Ho- Average Cash to current asset ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the average Cash to current asset ratio within the sample of selected service SMEs of Maharashtra. Comfort Commotrade ltd has the highest mean 1.208 followed by Mitcon Consultancy & Engineering service ltd 0.914, Jupitor info Media ltd i.e 0.151,DRA Consultancy pvt ltd .096 Cawasji Behramji Catering service ltd 0.075 , Creative Peripherals and Distribution Limited 0.054 .The lowest mean is of average Cash to current asset ratio is of Suyog Telematics ltd i.e 0.021 .

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 27.082 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Cash to current asset Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.2 :D) Current asset to total asset

Comparison of average current asset to total asset across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.740	.151	21.80	Value 29.756
Suyog Telematics ltd	.443	.221	14.20	*df - 6
Comfort Commotrade ltd	.287	.287	9.40	P value 0.00
Jupiter info media ltd	.095	.069	3.80	
Cawasji Behramji Catering services Ltd	.901	.055	27.60	
Mitcon Consultancy & Engineering Services Ltd	.540	.096	16.20	
Creative Peripherals and Distribution Limited	.984	.006	33.00	

Source – Computed

Ho- Average Current asset to total asset across SMEs of Service sector in Maharashtra are alike.

Table reflects the average current asset to total asset ratio within the sample of selected service SMEs of Maharashtra. Creative Peripherals and Distribution Limited has the highest mean 0.984 followed by Cawasji Behramji Catering service ltd 0.901, DRA Consultancy pvt ltd .740 Mitcon Consultancy & Engineering service ltd 0.540 Suyog Telematics ltd 0.443 , Comfort Commotrade ltd ,Jupitor info Media ltd has the lowest mean is of average current asset to total asset ratio.

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 29.756 with the six degree of freedom .

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average current assets to total asset Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.2 :E) Liquid asset to Current Asset ratio

Comparison of average Liquid asset to current asset ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	1.0	-	28.00	Value 32.396
Suyog Telematics ltd	.914	.0435	10.40	*df - 6
Comfort Commotrade ltd	1.0	-	28.00	P value 0.00
Jupiter info media ltd	1.0	-	28.00	
Cawasji Behramji Catering services Ltd	.925	.048	11.40	
Mitcon Consultancy & Engineering Services Ltd	.990	.007	17.20	
Creative Peripherals and Distribution Limited	.537	.074	3.00	

Source – Computed

Ho- Average Liquid asset to current asset across SMEs of Service sector in Maharashtra are alike.

Table reflects the average Liquid asset to Current Asset ratio within the sample of selected service SMEs of Maharashtra. The average Liquid asset to Current Asset of DRA Consultancy pvt ltd, Creative Peripherals and Jupitor info Media ltd has equal i.e 1.00. , followed by Mitcon Consultancy & Engineering service ltd has0.990, Cawasji Behramji Catering service ltd 0.925.

Distribution Limited and Suyog Telematics ltd has lowest mean is of average Liquid asset to current asset is 0.914.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 32.396 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the average Liquid assets to Current Asset ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.2 : F) Liquidity

Comparison of overall average Liquidity ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	1.289	.184	24.60	Value 25.299
Suyog Telematics ltd	.613	.182	6.20	*df - 6
Comfort Commotrade ltd	1.339	.327	25.80	P value 0.00
Jupiter info media ltd	.900	.422	15.00	
Cawasji Behramji Catering services Ltd	.824	.027	14.20	
Mitcon Consultancy & Engineering Services Ltd	1.909	.591	31.40	
Creative Peripherals and Distribution Limited	.752	.0541	8.80	

Source – Computed

Ho- Average Liquidity ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average liquidity within the sample of selected service SMEs of Maharashtra. The highest average overall liquidity of Mitcon Consultancy & Engineering service ltd 1.909,followed by Comfort Commotrade ltd 1.339, DRA Consultancy pvt ltd 1.289, Jupitor info Media ltd 0.900, Cawasji Behramji Catering service ltd 0.824.

Creative Peripherals and has equal i.e 1.00. Suyog Telematics ltd has lowest mean of 0.613.

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 25.299 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the overall liquidity across selected SMEs within service sector of Maharashtra.

6.9.3 Working Capital

Table - 6.9.3 :A)Working Capital Turnover Ratio

Comparison of average Working Capital Turnover ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	3.042	1.191	16.60	Value 22.488
Suyog Telematics ltd	-2.326	9.264	11.00	*df - 6
Comfort Commotrade ltd	2.669	1.670	15.00	P value 0.01
Jupiter info media ltd	.870	4.375	12.60	
Cawasji Behramji Catering services Ltd	23.669	25.011	29.20	
Mitcon Consultancy & Engineering Services Ltd	1.263	.638	9.80	
Creative Peripherals and Distribution Limited	16.317	.890	31.80	

Source – Computed

Ho- Average Working Capital Turnover ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the average Working Capital Turnover Ratio within the sample of selected service SMEs of Maharashtra. The highest average overall Working Capital Turnover Ratio of Cawasji Behramji Catering service ltd 23.669, Creative Peripherals and Distribution Limited is 16.317, DRA Consultancy pvt ltd is 3.042, Comfort Commotrade ltd is 2.669, Mitcon Consultancy & Engineering service ltd 1.263, Jupitor info Media ltd .870 ,

Suyog Telematics ltd has lowest mean of -2.326.

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 22.488 with the six degree of freedom .

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Working Capital Turnover Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.3 :B)Sales to current asset ratio

Comparison of average Sales to current asset ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	1.661	.665	13.00	Value 15.177
Suyog Telematics ltd	1.426	.514	12.00	*df - 6
Comfort Commotrade ltd	1.559	.362	13.60	P value 0.019
Jupiter info media ltd	1.711	.458	16.00	
Cawasji Behramji Catering services Ltd	2.104	.590	21.00	
Mitcon Consultancy & Engineering Services Ltd	1.967	.984	17.40	
Creative Peripherals and Distribution Limited	4.809	.746	33.00	

Source – Computed

Ho- Average Sales to current asset ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Sales to current asset Ratio within the sample of selected service SMEs of Maharashtra. The highest average overall Sales to current asset Ratio of Creative Peripherals and Distribution Limited 4.809, Cawasji Behramji Catering service ltd 2.104, Mitcon Consultancy & Engineering service ltd 1.967, Jupitor info Media ltd 1.711, DRA Consultancy pvt ltd is 1.661, Comfort Commotrade ltd is 1.559,

Suyog Telematics ltd has lowest mean of 1.426.

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 15.177 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between Sales to current asset ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.3 :C) Debtors Turnover Ratio

Comparison of average Debtors Turnover Ratio across SMEs of Service sector in Maharashtra

Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	2.896	2.144	7.80	Value 26.910
Suyog Telematics ltd	6.062	2.144	18.80	*df - 6
Comfort Commotrade ltd	35.613	15.633	32.60	P value 0
Jupiter info media ltd	10.667	9.258	21.60	
Cawasji Behramji Catering services Ltd	2.764	.711	8.20	
Mitcon Consultancy & Engineering Services Ltd	3.214	1.029	10.20	
Creative Peripherals and Distribution Limited	12.429	1.938	26.80	

Source – Computed

Ho- Average Debtors Turnover Ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Debtors Turnover Ratio within the sample of selected service SMEs of Maharashtra. The highest average overall Debtors Turnover Ratio of Comfort Commotrade ltd is 35.613, Creative Peripherals and Distribution Limited 12.429, Jupitor info Media ltd 10.667, Suyog Telematics ltd 6.062, Mitcon Consultancy & Engineering service ltd 3.214, DRA Consultancy pvt ltd is 2.896.

Cawasji Behramji Catering service ltd has lowest mean of 2.764.

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 26.910 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Debtors Turnover Ratio across selected SMEs within service sector of Maharashtra .

Table - 6.9.3 :D) Credit Strength Ratio

Comparison of average Credit Strength Ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.556	.289	17.20	Value 31.237

Suyog Telematics ltd	1.508	.787	22.80	*df - 6
Comfort Commotrade ltd	.374	.134	14.40	P value 0.00
Jupiter info media ltd	.074	.0410	4.60	
Cawasji Behramji Catering services Ltd	3.146	.509	31.30	
Mitcon Consultancy & Engineering Services Ltd	.118	.044	6.40	
Creative Peripherals and Distribution Limited	2.862	.404	29.30	

Source – Computed

Ho- Average Credit Strength Ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Credit Strength Ratio within the sample of selected service SMEs of Maharashtra. The highest average overall Credit Strength Ratio of Cawasji Behramji Catering service ltd 3.146, Creative Peripherals and Distribution Limited is 2.862, Suyog Telematics ltd is 1.508, DRA Consultancy pvt ltd is .556, Comfort Commotrade ltd is 0.374, 10.667, 6.062, Mitcon Consultancy & Engineering service ltd 0.118.

Jupitor info Media ltd has lowest mean of 0.074.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 26.910 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Credit Strength Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.3 :E) Working capital

Comparison of average Working capital across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	2.039	.897	9.00	Value 26.587
Suyog Telematics ltd	1.668	1.994	10.40	*df - 6
Comfort Commotrade ltd	10.054	4.267	29.20	P value 0
Jupiter info media ltd	3.330	1.406	15.60	

Cawasji Behramji Catering services Ltd	7.921	6.422	24.40
Mitcon Consultancy & Engineering Services Ltd	1.640	.659	7.60
Creative Peripherals and Distribution Limited	9.104	.792	29.80

Source – Computed

Ho- Average Working capital across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Working capital within the sample of selected service SMEs of Maharashtra. The highest average overall Working capital Ratio of Comfort Commotrade ltd is , Creative Peripherals and Distribution Limited is , Cawasji Behramji Catering service ltd , Jupitor info Media ltd , DRA Consultancy pvt ltd is , Suyog Telematics ltd is 1.508, .556, 0.374, 10.667, 6.062, 0.118.

Jupitor info Media ltd has lowest mean of 0.074.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 26.910 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Working capital across selected SMEs within service sector of Maharashtra.

6.9.4 Profitability Analysis

Table - 6.9.4 : A) Net Profit Ratio

Comparison of average Net Profit Ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.134	.008	24.80	Value 21.950
Suyog Telematics ltd	.109	.031	20.20	*df - 6
Comfort Commotrade ltd	.131	.096	21.20	P value 0.001
Jupiter info media ltd	.134	.110	21.00	
Cawasji Behramji Catering services Ltd	.033	.0141	8.80	

Mitcon Consultancy & Engineering Services Ltd	.163	.048	27.00	
Creative Peripherals and Distribution Limited	.006	.004	3.00	

Source – Computed

Ho- Average Degree of Net Profit Ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Net Profit Ratio within the sample of selected service SMEs of Maharashtra. The highest average overall Net Profit Ratio of Mitcon Consultancy & Engineering service ltd 0.163, DRA Consultancy pvt ltd is 0.134, Jupitor info Media ltd 0.134, Comfort Commotrade ltd is 0.131, Suyog Telematics ltd is 0.109, Cawasji Behramji Catering service ltd 0.033.

Creative Peripherals and Distribution Limited has lowest mean of 0.006.

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 21.950 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Net Profit Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.4 : B) Return on capital employed

Comparison of average Return on capital employed across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.371	.092	25.20	Value 23.421
Suyog Telematics ltd	.304	.121	18.80	*df - 6
Comfort Commotrade ltd	.199	.113	13.80	P value 0.001
Jupiter info media ltd	.0200	.012	3.00	
Cawasji Behramji Catering services Ltd	.514	.165	30.60	
Mitcon Consultancy & Engineering Services Ltd	.175	.113	13.00	
Creative Peripherals and Distribution	.314	.0583	21.60	

Limited				

Source – Computed

Ho- Average Return on capital employed across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Return on capital employed within the sample of selected service SMEs of Maharashtra. The highest average overall Return on capital employed of Cawasji Behramji Catering service ltd 0.514, DRA Consultancy pvt ltd is 0.371, Creative Peripherals and Distribution Limited is 0.314, Suyog Telematics ltd is .304, Comfort Commotrade ltd is 0.199, Mitcon Consultancy & Engineering service ltd 0.175.

Jupitor info Media ltd has lowest mean of 0.020.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 23.421 with the six degree of freedom.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Return on capital employed across selected SMEs within service sector of Maharashtra.

Table - 6.9.4 : C) Return on Asset

Comparison of average Degree of Return on Asset across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.156	.042	31.00	Value 27.451
Suyog Telematics ltd	.059	.017	18.40	*df - 6
Comfort Commotrade ltd	.038	.020	13.00	P value 0
Jupiter info media ltd	.013	.006	4.40	
Cawasji Behramji Catering services Ltd	.064	.031	19.40	
Mitcon Consultancy & Engineering Services Ltd	.173	.108	29.60	
Creative Peripherals and Distribution Limited	.027	.010	10.20	

Source – Computed

Ho- Average Return on Asset across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Return on Asset within the sample of selected service SMEs of Maharashtra. The highest average overall Return on Asset of Mitcon Consultancy & Engineering service ltd .173, DRA Consultancy pvt ltd is 0.156, Cawasji Behramji Catering service ltd 0.064, Suyog Telematics ltd is 0.059, Comfort Commotrade ltd is 0.038, Creative Peripherals and Distribution Limited is 0.027.

Jupitor info Media ltd has lowest mean of 0.013.

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 27.451 with six degree of freedom .

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Return on Asset across selected SMEs within service sector of Maharashtra.

Table - 6.9.4 : D) Return on net worth

Comparison of average Return on net worth across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.430	.219	20.60	Value 28.297
Suyog Telematics ltd	.244	.0585	14.80	*df - 6
Comfort Commotrade ltd	.242	.0919	15.20	P value 0
Jupiter info media ltd	.018	.0138	3.00	
Cawasji Behramji Catering services Ltd	1.345	.316	29.00	
Mitcon Consultancy & Engineering Services Ltd	.175	.113	11.80	
Creative Peripherals and Distribution Limited	2.134	1.008	31.60	

Source – Computed

Ho- Average Degree of Return on net worth across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Return on net worth within the sample of selected service SMEs of Maharashtra. The highest average overall Return on net worth of Creative Peripherals and Distribution Limited is 2.134, Cawasji Behramji Catering service ltd 1.345, DRA Consultancy pvt ltd is 0.430, Suyog Telematics ltd is 0.244, Comfort Commotrade ltd is 0.242, Mitcon Consultancy & Engineering service ltd 0.175.

Jupitor info Media ltd has lowest mean of 0.018.

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 28.297 with six degree of freedom.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Return on net worth across selected SMEs within service sector of Maharashtra.

Table - 6.9.4 : E) Return on Asset ratio

Comparison of average Return on Asset ratioacross SMEs of Service sector in Maharashtra

Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.156	.0420	31.00	Value 27.451
Suyog Telematics ltd	.059	.0172	18.40	*df - 6
Comfort Commotrade ltd	.038	.0196	13.00	P value 0
Jupiter info media ltd	.014	.006	4.40	
Cawasji Behramji Catering services Ltd	.064	.031	19.40	
Mitcon Consultancy & Engineering Services Ltd	.173	.108	29.60	
Creative Peripherals and Distribution Limited	.027	.010	10.20	

Source – Computed

Ho- Average Return on Asset ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Return on Asset ratio within the sample of selected service SMEs of Maharashtra. The highest average overall Return on Asset ratio of Mitcon Consultancy & Engineering service ltd 0.173, DRA Consultancy pvt ltd is 0.156, Cawasji Behramji Catering service ltd .064, Suyog Telematics ltd is 0.059, Comfort Commotrade ltd is 0.038, Creative Peripherals and Distribution Limited is 0.027.

Jupitor info Media ltd has lowest mean of 0.014.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 27.451with the six degree of freedom.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Return on Asset ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.4 : F) Profitability

Comparison of average Profitability across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.250	.0764	22.40	Value 25.021
Suyog Telematics ltd	.155	.0349	15.00	*df - 6

Company	Mean	Standard Deviation	Mean Rank	
Comfort Commotrade ltd	.130	.0596	12.20	P value 0
Jupiter info media ltd	.040	.0211	3.20	
Cawasji Behramji Catering services Ltd	.404	.100	28.80	
Mitcon Consultancy & Engineering Services Ltd	.172	.096	15.40	
Creative Peripherals and Distribution Limited	.502	.213	29.00	

Source – Computed

Ho- Average Degree of Profitability across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Profitability within the sample of selected service SMEs of Maharashtra. The highest average overall Profitability of Creative Peripherals and Distribution Limited is 0.502, Cawasji Behramji Catering service ltd 0.404, DRA Consultancy pvt ltd is 0.250, Mitcon Consultancy & Engineering service ltd 0.172, Suyog Telematics ltd is 0.155, Comfort Commotrade ltd is 0.130.

Jupitor info Media ltd has lowest mean of 0.040.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 25.021 with the six degree of freedom .

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Profitability across selected SMEs within service sector of Maharashtra.

6.9.5 Capital Structure Analysis

Table - 6.9.5: A) Debt Equity Ratio

Comparison of average Debt Equity Ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.054	.069	14.80	Value 28.316
Suyog Telematics ltd	.933	.439	24.60	*df - 6

Comfort Commotrade ltd	.004	.007	9.00	P value 0
Jupiter info media ltd	.022	.0340	12.20	
Cawasji Behramji Catering services Ltd	1.227	.532	26.40	
Mitcon Consultancy & Engineering Services Ltd	.000	0E-7	6.00	
Creative Peripherals and Distribution Limited	2.354	.373	33.00	

Source – Computed

Ho- Average Debt Equity Ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Debt Equity Ratio within the sample of selected service SMEs of Maharashtra. The highest average overall Debt Equity Ratio of Creative Peripherals and Distribution Limited is 2.354, Cawasji Behramji Catering service ltd 1.227, Suyog Telematics ltd is 0.933, DRA Consultancy pvt ltd is .054, Jupitor info Media ltd 0.22, Comfort Commotrade ltd is 0.004.

Mitcon Consultancy & Engineering service ltd has lowest mean of 0.000.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 28.316 with six degree of freedom.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Debt Equity Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.5: B) Proprietary Ratio

Comparison of average Proprietary Ratio across SMEs of Service sector in Maharashtra			
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.638	.095	21.80	Value 29.873
Suyog Telematics ltd	.392	.096	16.60	*df - 6
Comfort Commotrade ltd	.335	.231	10.20	P value 0
Jupiter info media ltd	.927	.044	28.00	
Cawasji Behramji Catering services Ltd	.254	.045	8.60	

Mitcon Consultancy & Engineering Services Ltd	1.449	.197	33.00	
Creative Peripherals and Distribution Limited	.246	.028	7.80	

Ho- Average Proprietary Ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Proprietary Ratio within the sample of selected service SMEs of Maharashtra. The highest average overall Proprietary Ratio of Mitcon Consultancy & Engineering service ltd 1.449, Jupitor info Media ltd 0.927, DRA Consultancy pvt ltd is 0.638, Suyog Telematics ltd is 0.392, Comfort Commotrade ltd is 0.335, Cawasji Behramji Catering service ltd 0.254.

Creative Peripherals and Distribution Limited is has lowest mean of 0.246.

The significance of mean difference is tested using Kruskal Wallis test, it is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 29.873 with the degree of freedom 6.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Proprietary Ratio across selected SMEs within service sector of Maharashtra.

Table - 6.9.5: C) Debt to Asset Ratio

Comparison of average Degree of Debt to Asset Ratio across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.036	.043	12.00	Value 29.748
Suyog Telematics ltd	.338	.098	26.00	*df - 6
Comfort Commotrade ltd	.004	.006	5.20	P value 0
Jupiter info media ltd	.020	.031	8.80	
Cawasji Behramji Catering services Ltd	.293	.108	24.80	
Mitcon Consultancy & Engineering Services Ltd	.058	.022	16.20	
Creative Peripherals and Distribution Limited	.571	.047	33.00	

Ho- Average Debt to Asset Ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Debt to Asset Ratio within the sample of selected service SMEs of Maharashtra. The highest average overall Debt to Asset Ratio of Creative Peripherals and Distribution Limited is 0.571, Suyog Telematics ltd is 0.338, Cawasji Behramji Catering service ltd 0.293, Mitcon Consultancy & Engineering service ltd 0.058, DRA Consultancy pvt ltd is .036, Jupitor info Media ltd 0.20.

Comfort Commotrade ltd has lowest mean of 0.004.

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 29.748 with six the degree of freedom.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Debt to Asset Ratioacross selected SMEs within service sector of Maharashtra.

Table - 6.9.5: D) Capital structure

Comparison of average Capital structure across SMEs of Service sector in Maharashtra				
Company	Mean	Standard Deviation	Mean Rank	Chi-Square Result
DRA Consultants Pvt Ltd	.146	.0271	7.80	Value 29.364
Suyog Telematics ltd	.333	.0920	23.00	*df - 6
Comfort Commotrade ltd	.069	.0456	3.80	P value 0
Jupiter info media ltd	.194	.016	13.60	
Cawasji Behramji Catering services Ltd	.355	.119	23.60	
Mitcon Consultancy & Engineering Services Ltd	.301	.0385	21.20	
Creative Peripherals and Distribution Limited	.634	.0779	33.00	

Source – Computed

Ho- Average Capital structure Ratio across SMEs of Service sector in Maharashtra are alike.

Table reflects the overall average Capital structure Ratio within the sample of selected service SMEs of Maharashtra. The highest average overall Capital structure Ratio of Creative Peripherals and Distribution Limited is 0.634. Cawasji Behramji Catering service ltd 0.355,

Suyog Telematics ltd is 0.333, Mitcon Consultancy & Engineering service ltd 0.301, Jupitor info Media ltd 0.194 DRA Consultancy pvt ltd is .146.

Comfort Commotrade ltd has lowest mean of 0.069.

The significance of mean difference is tested using Kruskal Wallis test, It is statistically proven that the mean rank of selected SMEs shows a real difference with in the sector. Test results have generated the Chi square value of 29.364with six the degree of freedom.

The P value is lesser than 0.05 and hence, the null hypothesis (H0) is Rejected.

This table reflects that there exists a significant difference between the Capital structureRatio across selected SMEs within service sector of Maharashtra.

6.10 COMPARISON OF FINANCIAL PARAMETERS ACROSS SMES OF MAHARASHTRA WITHIN SERVICE SECTOR AND MANUFACTURING SECTOR USING t TEST

Table - 6.10 Comparison of Financial Parameters across SMEs of Maharashtra within Service sector and Manufacturing sector using t test

Financial Parameters	Manufacturing sector		Service service		t Value	P value
	Mean	Standard Deviation	Mean	Standard Deviation		
Solvency	0.514	0.249	0.419	0.205	2.778	0.008
Liquidity	0.65	0.175	0.39	0.183	-2.139	0.037
working capital	0.286	0.469	0.264	0.233	-3.387	0.001
Profitability	0.437	0.271	0.331	0.254	-2.044	0.046
capital structure	0.483	0.261	0.41	0.261	-0.049	0.961

Source – Computed

Ho-There is a no significant difference in average of financial parameters viz. solvency, Liquidity, Working capital, Profitability, capital structure across manufacturing sector and service sector of SMEs in Maharashtra.

Above table shows the average of Solvency, Liquidity, Working capital, Profitability, capital structure with respect to manufacturing and service sector by taking selected SMEs of Maharashtra for the year 2010-11to 2015-16.

As per the table there exists a real difference in average of Solvency, Liquidity, and Working capital across service sector and Manufacturing sector. On the other side Parameters viz. Profitability, capital structure are similar across service sector and Manufacturing sector.

6.11 COMPARATIVE ANALYSIS OF ALL RATIOS ACROSS SMES BETWEEN MANUFACTURING SECTOR AND SERVICE SECTOR IN MAHARASHTRA

Table - 6.11 Comparative analysis of all ratios across SMEs between manufacturing sector and Service Sector in Maharashtra

Financial Parameters	Manufacturing sector		Service sector		t Value	P value
	Mean	Standard Deviation	Mean	Standard Deviation		
A. Solvency Analysis						
1. Fixed Asset to long term funds Ratio	0.311	0.304	0.310	0.255	0.014	0.989
2. Long term Debt to Asset Ratio	0.215	0.314	0.206	0.268	0.119	0.906
3. Degree of Financial Leverage	0.391	0.270	0.452	0.231	-0.934	0.354
B. Liquidity						
1. Current Ratio	0.484	0.211	0.311	0.186	3.345	0.001
2. Quick Ratio	0.477	0.188	0.293	0.199	3.604	0.001
3. Cash to Current Asset Ratio	0.392	0.362	0.109	0.193	3.561	0.001
4. Current Asset to Total Asset Ratio	0.676	0.228	0.575	0.339	1.373	0.175
5. Liquid asset to Current asset Ratio	0.821	0.109	0.909	0.162	-2.358	0.022
C. Working Capital Analysis						
1. Working Capital Turnover ratio	-0.007	0.874	0.095	0.190	-0.576	0.569
2. Sales to Current asset ratio	0.494	0.249	0.377	0.217	1.942	0.057
3. Debtors Turnover Ratio	0.451	0.239	0.175	0.211	4.723	0.000
4. Credit Strength ratio	0.374	0.295	0.333	0.345	0.473	0.638
D. Profitability analysis						
1. Net profit ratio	0.271	0.252	0.325	0.247	-0.822	0.414
2. Return On capital Employed Ratio	0.339	0.257	0.362	0.236	-0.372	0.711
3. Net profit before tax to total asset Ratio	0.310	0.288	0.240	0.231	1.046	0.300
4. Return on Net Worth Ratio	0.471	0.278	0.209	0.263	3.715	0.000
5. Net Profit after Tax to Total Asset Ratio	0.271	0.252	0.240	0.231	0.498	0.620
E. Capital structure Analysis						
1. Debt Equity Ratio	0.322	0.299	0.246	0.334	0.914	0.364
2. Proprietary Ratio	0.744	0.216	0.356	0.255	6.195	0.000
3. Debt To Asset Ratio	0.551	0.386	0.295	0.331	2.756	0.008

Source – Computed

Ho Average of ratios across the service and manufacturing are alike.

Above Table indicates p value is greater than 0.05 for the following ratios

Fixed Asset to long term funds Ratio

Long term Debt to Asset Ratio

Degree of Financial Leverage

Current Asset to Total Asset Ratio

Working Capital Turnover ratio

Sales to Current asset ratio

Credit Strength ratio

Net profit ratio

Return On capital Employed Ratio

Net profit before tax to total asset Ratio

Net Profit after Tax to Total Asset Ratio

Debt Equity Ratio

It concludes that in above ratios, there is no significant different in average across manufacturing and service sector of SMEs in Maharashtra.

p value is greater than 0.05 for the following ratios

Current Ratio

Quick Ratio

Cash to Current Asset Ratio

Debtors Turnover Ratio

Return on Net worth Ratio

Proprietary Ratio

Debt to Asset Ratio

It concludes that in above ratios, there is a significant different in average across manufacturing and service sector of SMEs in Maharashtra.

6.12 CORRELATION ANALYSIS AND TESTING OF HYPOTHESES OF SMEsOF MANUFACTURING SECTOR IN MAHARASHTRA.

"Correlation is a bivariate analysis that measures the strength of association between two variables and the direction of the relationship. In terms of the strength of relationship, the value of the correlation coefficient varies between +1 and -1. A value of ± 1 indicates a perfect degree of association between the two variables. As the correlation coefficient value goes towards 0, the relationship between the two variables will be weaker."[111] The direction of the relationship is indicated by the sign of the coefficient; a + sign indicates a positive relationship and a – sign indicates a negative relationship.

Pearson r correlation: "Pearson *r* correlation is the most widely used correlation statistic to measure the degree of the relationship between linearly related variables. For example, in the stock market, if we want to measure how two stocks are related to each other, Pearson *r* correlation is used to measure the degree of relationship between the two. The correlation is conducted with the Pearson correlation formula except that one of the variables is dichotomous."[112] The following formula is used to calculate the Pearson *r* correlation:

$$r = \frac{N \sum xy - \sum (x)(y)}{\sqrt{[N \sum x^2 - \sum (x^2)][N \sum y^2 - \sum (y^2)]}}$$

r = Pearson r correlation coefficient

N = number of observations

∑xy = sum of the products of paired scores

∑x = sum of x scores

∑y = sum of y scores

∑x2= sum of squared x scores

∑y2= sum of squared y scores

Table - 6.12.1 : A Correlation between Solvency and Profitability and testing the significance of the relationship.

Correlation between ROCE and	Pearson Correlation 'r' value	p- value
Solvency ratio		
1. Fixed asset to long term funds Ratio	-0.11	0.599
2. Long term debt to total asset ratio	-.483*	0.014
3. Degree of financial leverages	-0.105	0.616

Source – Computed

A. Correlation between Solvency and Profitability and testing the significance of the relationship.

Hypothesis:

In each case, we have tested the significance of Correlation coefficient with the help of the following two assumptions:

Null Hypothesis (H0): There is no significant correlation between Solvency and Profitability.

Interpretation of the hypothesis testing based on correlation statistics and relevant inference at 0.05 level of significance.

1 **Relation between Fixed asset to long term funds Ratio and Return on Capital employed (ROCE):**

Relation between Fixed asset to long term funds ratio and Return on capital employed (ROCE): in respect of the correlation between the Fixed asset to long term funds ratio and Return on capital employed, the null hypothesis (H0) is accepted and alternative hypothesis is rejected. Thus, we conclude that there is a no significant positive correlation between Fixed asset to long term funds ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

2 **Relation between Long term debt to total asset ratio and Return on capital employed (ROCE):**

In respect of the correlation between Long term debt to total asset ratio and Return on capital employed, the null hypothesis (H0) is rejected and alternative hypothesis is accepted. Thus, we conclude that there is a significant positive correlation between

Long term debt to total asset ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

3 Relation between Degree of financial leverages and Return on capital employed (ROCE):

In respect of the correlation between Degree of financial leverages and Return on capital employed, the null hypothesis (H0) is accepted and alternative hypothesis is rejected. Thus, we conclude that there is a no significant positive correlation Degree of financial leverages and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

Table - 6.12.2 Correlation between Liquidity and testing the significance of the relationship.

Correlation between ROCE and	Pearson Correlation 'r' value	Sig. (2-tailed),35
B. Liquidity Ratios		
1. Current Ratio (CR)	-0.126	0.549
2. Quick Ratio (QR)	0.129	0.539
3. Cash to current asset ratio	.559[**]	0.004
4. current asset to total asset Ratio	0.264	0.203
5. Liquid asset to current asset Ratio	.614[**]	0.001

Source – Computed

B. Correlation between Liquidity and testing the significance of the relationship.

Hypothesis:

In each case, we have tested the significance of Correlation coefficient with the help of the following two assumptions:

Null Hypothesis (H0): There is no significant correlation between Liquidity and Profitability.

Alternative Hypothesis (H1): There is significant correlation between Liquidity and Profitability.

Level of significance = 0.05

Interpretation of the hypothesis testing based on correlation statistics and relevant inference at 0.05 level of significance

1   **Relation between current ratio and Return on capital employed (ROCE)**:

In respect of the correlation between current ratio and Return on capital employed, the null hypothesis (H0) is accepted and alternative hypothesis is rejected. Thus, we conclude that there is no significant positive correlation current ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

2   **Relation between Quick ratio and Return on capital employed (ROCE):**

In respect of the correlation between Quick ratio and Return on capital employed, the null hypothesis (H0) is accepted and alternative hypothesis is rejected. Thus, we conclude that there is no significant positive correlation Quick ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

3   **Relation between Cash to current asset ratio and Return on capital employed (ROCE):**

 In respect of the correlation between Cash to current asset ratio and Return on capital employed, the null hypothesis (H0) is rejected and alternative hypothesis is accepted. Thus, we conclude that there is significant positive correlation Cash to current asset ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

4   Relation between current asset to total asset Ratio and Return on capital employed (ROCE):

In respect of the correlation between current asset to total asset Ratio and Return on capital employed, the null hypothesis (H0) is accepted and alternative hypothesis is rejected. Thus, we conclude that there is no significant positive correlation current asset to total asset Ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

5 Relation between Liquid asset to current asset Ratio and Return on capital employed (ROCE):

In respect of the correlation between Liquid asset to current asset Ratio and Return on capital employed, the null hypothesis (H0) is rejected and alternative hypothesis is accepted. Thus, we conclude that there is significant positive correlation Liquid asset to current asset Ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

Table - 6.12.3 : Correlation between Working Capital ratio and testing the significance of the relationship.

Correlation between ROCE and	Pearson Correlation 'r' value	Sig. (2-tailed),35
C Working Capital ratio		
1. Working capital turnover Ratio	0.261	0.208
2. Sales to current Asset ratio	.674**	0.00
3. Debtors turnover ratio	.445*	0.026
4. Credit strength ratio	0.253	0.223

Source – Computed

C. Correlation between Working Capital ratio **and testing the significance of the relationship.**

Hypothesis:

In each case, we have tested the significance of Correlation coefficient with the help of the following two assumptions:

Null Hypothesis (H0): There is no significant correlation between Working Capital ratio and Profitability of SMEs of Manufacturing sector in Maharashtra.

Alternative Hypothesis (H1): There is significant correlation between Working Capital ratio and Profitability of SMEs of Manufacturing sector in Maharashtra

Level of significance = 0.05

Interpretation of the hypothesis testing based on correlation statistics and relevant inference at 0.05 level of significance

1. **Relation between Working capital turnover Ratio and Return on capital employed (ROCE):**

   In respect of the correlation between Working capital turnover Ratio and Return on capital employed, the null hypothesis (H0) is accepted and alternative hypothesis is rejected. Thus, we conclude that there is no significant positive correlation Working capital turnover Ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

2. **Relation between Sales to current Asset ratio to current asset Ratio and Return on capital employed (ROCE):**

   In respect of the correlation between Sales to current Asset ratio to current asset Ratio and Return on capital employed, the null hypothesis (H0) is rejected and alternative hypothesis is accepted. Thus, we conclude that there is significant positive correlation Sales to current Asset ratio to current asset Ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

3. **Relation between Debtors turnover ratio to current asset Ratio and Return on capital employed (ROCE):**

   In respect of the correlation between Debtors turnover ratio to current asset Ratio and Return on capital employed, the null hypothesis (H0) is rejected and alternative hypothesis is accepted. Thus, we conclude that there is significant positive correlation Debtors turnover ratio to and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

4 Relation between Credit strength ratio and Return on capital employed (ROCE):

In respect of the correlation between Credit strength ratio and Return on capital employed, the null hypothesis (H0) is accepted and alternative hypothesis is rejected. Thus, we conclude that there is no significant positive correlation Credit strength ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

Table - 6.12.4 : Correlation between Capital Structure and testing the significance of the relationship.

Correlation between ROCE and	Pearson Correlation 'r' value	Sig. (2-tailed),35
D Capital Structure		
1. Debt equity ratio	-.533[**]	0.006
2. Proprietary Ratio	-0.165	0.429
3. Total Debt to asset Ratio	-.768[**]	0.00

Source – Computed

D. Correlation between Capital Structure and testing the significance of the relationship.

Hypothesis:

In each case, we have tested the significance of Correlation coefficient with the help of the following two assumptions:

Null Hypothesis (H0): There is no significant correlation between Capital Structure and Profitability of SMEs of Manufacturing sector in Maharashtra

Alternative Hypothesis (H1): There is significant correlation between Capital Structure and Profitability of SMEs of Manufacturing sector in Maharashtra

Level of significance = 0.05

1 Relation between Sales to current Asset ratio to current asset Ratio and Return on capital employed (ROCE):

In respect of the correlation between Debt equity ratio and Return on capital employed, the null hypothesis (H0) is rejected and alternative hypothesis is accepted. Thus, we conclude that there is significant positive correlation Debt equity ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

2 Relation between Proprietary Ratio and Return on capital employed (ROCE):

In respect of the correlation between Proprietary Ratio and Return on capital employed, the null hypothesis (H0) is accepted and alternative hypothesis is rejected. Thus, we conclude that there is no significant positive correlation between Proprietary Ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

3 Relation between Total Debt to asset Ratio and Return on capital employed (ROCE):

In respect of the correlation between Total Debt to asset Ratio and Return on capital employed, the null hypothesis (H0) is rejected and alternative hypothesis is accepted. Thus, we conclude that there is significant positive correlation Total Debt to asset Ratio and Return on capital employed at 0.05 level of significance with 25 degree of freedom.

6.13 REGRESSION ANALYSIS OF FINANCIAL PARAMETERS AND PROFITABILITY (RETURN ON CAPITAL EMPLOYED)

6.13.1 Selected SMEs of Manufacturing sector in Maharashtra

Table - 6.13.1 : A) Solvency

Regression	Coefficients			t value	p value
	Ratio	Coefficient Value			
R2 0.439 F value 5.470 p value 0.006	Fixed Asset to long term funds Ratio	-0.105		-0.752	0.461
	Long term Debt to Asset Ratio	-0.623		-3.919	0.001
	Degree of Financial Leverage	-0.512		-2.743	0.012
	Constant	0.705		6.054	0.00

Source – Computed

As per the regression result, mathematical relation between ROCE and Solvency explained as follows

ROCE =   (-0.623)*(Long term debt to Asset ratio)+(-0.512)*(Degree of Financial Leverage) + 0.705

Above regression model describe the relationship between the Return on Capital Employed (ROCE) with respect to Solvency Ratios mentioned in the above table. Result shows that there exist significant relationship as p-value of model found to be less than 0.05 (p-value=0.006) with explained amount of variation r2 is 0.439 between P4R2 ratio with Solvency ratios. Also table shows that out of total Ratios of Solvency except Fixed Asset to Long Term Fund ratio remaining two ratios along with constant found to be significantly associated with Return on capital employed.

Table - 6.13.1 : B)Liquidity

Regression	Coefficients			
	Ratio	Coefficient Value	t value	p value
R2 .590 F value 5.468 p value .003	Current Ratio	0.535	0.466	0.647
	Quick Ratio	-0.469	-0.403	0.691
	Cash to Current Asset Ratio	0.297	2.458	0.024
	Current Asset to Total Asset Ratio	0.108	0.58	0.569
	Liquid asset to Current asset Ratio	1.652	1.722	0.101
	Constant	-1.242	-1.504	0.149

Source – Computed

As per the regression result, mathematical relation between ROCE and Liquidity explained as follows

ROCE = (0.297)*(Cash to Current Asset Ratio)

Above Table depicts regression model describe the relationship between the Return on Capital Employed (ROCE) with respect to Liquidity Ratios mentioned in the above table. Result shows that there exist significant relationship as p-value of model found to be less than 0.05 (p-value=0.006) with explained amount of variation r2 is 0.590 between ROCE ratio with Liquidity ratios. Also table shows that out of total Ratios of Liquidity except Cash to current asset ratio all other ratios along with constant found to be insignificantly associated with ROCE ratio.

Table - 6.13.1 :C)Working capital analysis

Regression	Coefficients		t value	p value
	Ratio	Coefficient Value		
R2 .696 F value 11.446 p value .000	Working Capital Turnover ratio	0.15	3.457	0.002
	Sales to Current asset ratio	1.047	4.341	0.00
	Debtors Turnover Ratio	-0.523	-2.084	0.05
	Credit Strength ratio	0.327	2.534	0.02
	Constant	-0.064	-0.791	0.438

Source – Computed

As per the regression result, mathematical relation between ROCE and Working capital explained as follows:-

ROCE=0.15* Working Capital Turnover ratio+1.047* Sales to Current asset ratio+(-0.523)* Debtors Turnover Ratio+0.327* Credit Strength ratio

Above Table depicts regression model describe the relationship between the Return on Capital Employed (ROCE) with respect to Working capital ratio mentioned in the above table. Result shows that there exist significant relationship as p-value of model found to be less than 0.05 (p-value=0.006) with explained amount of variation r2 is 0.696 between ROCE ratio with working capital ratios. Also table shows that all Ratios of working capital except the constant found to be significantly associated with ROCE ratio.

Table - 6.13.1 : D)Capital structure

Regression	Coefficients		t value	p value
	Ratio	Coefficient Value		
R2 .782 F value 25.051 p value .000	Debt Equity Ratio	-0.506	-1.89	0.073
	Proprietary Ratio	-0.806	-3.821	0.001
	Debt To Asset Ratio	-0.309	-1.889	0.073
	Constant	1.272	7.322	0.00

Source – Computed

As per the regression result, mathematical relation between ROCE and capital structure explained as follows:-

ROCE= (-0.806)* Proprietary Ratio +1.272

Above Table depicts regression model describe the relationship between the Return on Capital Employed (ROCE) with respect to Capital structure ratio mentioned in the above table in manufacturing sector. Result shows that there exist significant relationship as p-value of model found to be less than 0.05 (p-value=0.006) with explained amount of variation r2 is 0.782 between ROCE ratio with capital structure ratios. Also table shows that Proprietary Ratio f capital structure along with the constant found to be significantly associated with ROCE ratio.

6.13.2 Service Sector

Table - 6.13.2 : A) Solvency

Regression	Coefficients		t value	p value
	Ratio	Coefficient Value		
R2 .319 F value 4.845 p value .007	Fixed Asset to long term funds Ratio	0.499	3.195	0.003
	Long term Debt to Asset Ratio	-0.059	-0.442	0.662
	Degree of Financial Leverage	-0.561	-3.275	0.003
	Constant	0.473	5.636	0.00

Source – Computed

As per the regression result, mathematical relation between ROCE and Solvency explained as follows

ROCE = 0.499*(Fixed Asset to long term funds Ratio) + (-0.561)*(Degree of Financial Leverage) + 0.473

Above regression model describe the relationship between the Return on Capital Employed (ROCE) with respect to Solvency Ratios mentioned in the above table. Result shows that there exist significant relationship as p-value of model found to be less than 0.05 (p-value=0.006) with explained amount of variation r2 is 0.319 between ROCE ratio with Solvency ratios. Also table shows that out of total Ratios of Solvency except Long term Debt to Asset Ratio remaining two ratios along with constant found to be significantly associated with ROCE ratio.

Table - 6.13.2 :B) Liquidity

Regression	Coefficients		t value	p value
	Ratio	Coefficient Value		
	Current Ratio	-6.414	-0.782	0.441
R2 .566 F value 7.560 p value .000	Quick Ratio	5.836	0.708	0.484
	Cash to Current Asset Ratio	0.106	0.639	0.528
	Current Asset to Total Asset Ratio	0.587	5.357	0.00
	Liquid asset to Current asset Ratio	-0.823	-0.416	0.681
	Constant	1.046	0.541	0.592

Source – Computed

As per the regression result, mathematical relation between ROCE and Liquidity explained as follows

ROCE = (0.587)*(Current Asset to Total Asset Ratio)

Above Table depicts regression model describe the relationship between the Return on Capital Employed (ROCE) with respect to Liquidity Ratios mentioned in the above table. Result shows that there exist significant relationship as p-value of model found to be less than 0.05 (p-value=0.006) with explained amount of variation r2 is .566 between ROCE ratio with Liquidity ratios. Also table shows that out of total Ratios of Liquidity except Current Asset to Total Asset Ratio all other ratios along with constant found to be insignificantly associated with ROCE ratio.

Table - 6.13.2 : C) Working capital analysis

Regression	Coefficients		t value	p value
	Ratio	Coefficient Value		
	Working Capital Turnover ratio	0.047	0.235	0.816
R2 .463 F value 4.704 p value .008	Sales to Current asset ratio	-0.144	-0.839	0.408
	Debtors Turnover Ratio	-0.123	-0.792	0.434
	Credit Strength ratio	0.465	4.108	0.00
	Constant	0.279	3.965	0.00

Source – Computed

As per the regression result, mathematical relation between ROCE and Working capital explained as follows:-

ROCE=0.465* Credit Strength ratio +0.279

Above Table depicts regression model describe the relationship between the Return on Capital Employed (ROCE) with respect to Working capital ratio mentioned in the above table. Result shows that there exist significant relationship as p-value of model found to be less than 0.05 (p-value=0.006) with explained amount of variation r2 is 463 between ROCE ratio with working capital ratios. Also table shows that Credit Strength ratio of working capital along the constant found to be significantly associated with ROCE ratio.

Table - 6.13.2 :D) Capital structure

Regression	Coefficients		t value	p value
	Ratio	Coefficient Value		
R2 .313 F value 25.051 p value .000	Debt Equity Ratio	-0.122	-0.249	0.805
	Proprietary Ratio	-0.401	-2.335	0.026
	Debt To Asset Ratio	0.263	0.552	0.585
	Constant	0.457	5.01	0.00

Source – Computed

As per the regression result, mathematical relation between ROCE and capital structure explained as follows:-

ROCE= (-0.401)* Proprietary Ratio +0.457

Above Table depicts regression model describe the relationship between the Return on Capital Employed (ROCE) with respect to Capital structure ratio mentioned in the above table in service sector. Result shows that there exist significant relationship as p-value of model found to be less than 0.05 (p-value=0.006) with explained amount of variation r2 is .313 between ROCE ratio with capital structure ratios. Also table shows that Proprietary Ratio of capital structure along with the constant found to be significantly associated with ROCE ratio.

CHAPTER – 7

CONCLUSION AND SUGGESTION

The analysis and the interpretations have disclosed the following facts about the effectiveness of the performance of SMEs across manufacturing sector and Service sector in Maharashtra. It is arranged in the logical order. They help to identify the strength and weakness of the selected SMEs.

7.1   FINDINGS ON THE TREND OF APPLICATION AND SOURCES OF FUND

- Shareholders fund and reserves and surplus of SMEs in both the sector i.e manufacturing and services depicts the increasing trend .This is sign of growth and more investment in the business. Reserves help in strengthening the financial position of the enterprise, since it can be used to meet any unforeseen losses that may arise in future.

- In manufacturing sector, Borrowed funds also reveals increasing trend .Filtra consultant and engineers ltd and Valiant organic ltd are debt free units. The choice most often depends upon which source of funding is most easily accessible for the SME, its cash flow and how important maintaining control of the business is in hands of principal owner.

  In service sector, Jupitor Info Media ltd shows no borrowed funds .In other units also long term borrowed fund follows the stable trend .It can be concluded that long term borrowed funds play insignificant role in SMEs ,this can be due to lack of access to bank loan or problems of paper work while taking long term finance.

- Current liabilities display the increasing and volatile trend .The major component of current liabilities are short term funds and trade payable. There is volatility in trade payable, this can be due to cyclical, seasonal business and customised business of

SMEs. As majorly SMEs have customised products depending upon the requirement of large companies and it play major role of subsidiary to large companies .As they have Business to business product rather than business to customer product. It can also be concluded that SMEs rely more on short term funds than long term funds.

- The major rise on the liabilities side is due to the increase in the reserves and current liabilities. The maximum rise on the asset side is due to the increase in inventories, sundry debtors, cash in hand.

- Capital employed of SMEs in both the sector shows the increasing trend; this is majorly due to increase of reserves and surplus and due to increase in current assets over the study period.

- Fixed asset are increasing over the study period both in Manufacturing and Service sector SMEs. The average Fixed asset of manufacturing sector is higher than the service sector over the study period.

- The co-efficient of variance shows huge volatility in the current assets of selected companies in Manufacturing and service sector. This is mainly due to fluctuation in debtors and cash of units over the study period. The cash balance in a company rises and falls based on inflows and outflows of operational cash and financing activities. Manufacturing SMEs have higher investment in operations compare to service sector in SMEs .The major reason is due to higher investment is required in inventories where in service sector doesn't need higher amount of funds invested in stock.

- The main reason of increasing the investments in liquid assets is due to increasing debtors over the period of study. In a way debtors have increased due to increase in turnover.

- Working capital of selected SMEs shows very high fluctuation. The standard deviation and co-efficient of variation indicates that there was a lack of uniformity and consistency in working capital.

- Revenue from operations shows a drastic change in the last two years of the period of study. It is evident from the standard deviation figures that the sample companies are

not earning uniformly. Revenue from operation of SMEs in manufacturing sector and service sector displays the overall growth.

- Preference share capital is not popular as a source of finance in the selected sample units.

7.2 FINDINGS ON PERFORMANCE OF SOLVENCY OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

- **Fixed assets to long term funds** Analysis of the overall position of the fixed assets to long term funds ratio reveals investment in the sample units shows that the size of investments improved considerably during the period of study. Plant and machinery formed the dominant item of fixed assets in all sample SMEs of Manufacturing sector. Only Bajaj health care ltd has an average fixed asset ratio greater than one which depicts operational inefficiency. This is because the fixed assets are financed by short term borrowings. It is also found that Long term funds are used for operational capital.

  Kruskal wallis test Table 6.8.1 A) and 6.9.1 A) concludes there exist significant difference across SMEs within Manufacturing sector and service sector of Maharashtra .

  t test table 6.11 reveals that average Fixed asset to long term funds ratio of SMEs of Manufacturing and Service sector are alike.

  Regression analysis table 6.13.2 A) also predicts that Fixed asset to long term funds of service sector impacts on return on capital employed .

- **Long term Debt to Asset Ratio**- Almost all the SMEs use equity in financing their assets. Most of the companies use more equity in proportion to their debt. Service sector SMEs do not use long term debt may be due to inability to access finance through loan which is reflected in their low growth of revenue from operation.

  Kruskal Wallis test Table 6.8.1B) and 6.9.1 B) concludes this ratio varies across both manufacturing sector and service sector.

t test table 6.11 reveals that concludes long term debt to asset ratio in manufacturing sector significantly differ from service sector. SMEs of Service sector have lower debt comparing to manufacturing sector.

Regression analysis table **6.13.1 A**)concludes long term debt to asset ratio negatively impacts the return on capital employed.

- **Degree of Financial Leverage**- In manufacturing sector, Bajaj health care ltd is lower than 1 as it indicates risk averse unit. Patdiam jewellwry ltd has Financial leverage ratio more than 2 ,it is challenging.

  In service sector, DRA consultant pvt ltd ,Comfort commotrade ltd ,Cawasji Behramji Catering services ltd, Creative Peripherals and Distribution ltd has less than 1 Financial average Ratio. These SMEs are highly risk averse and not taking up projects, which could add value to the business.

  Kruskal Wallis test Table 6.8.1C) and 6.9.1 C) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

  t test table 6.11 reveals that concludes average financial leverage is similar across SMEs of both manufacturing and service sector.

  Regression analysis table 6.13.1 A), 6.13.2 A)concludes leverage ratio negatively impacts the return on capital employed. To improve the return on capital employed SMEs should increase the earnings before interest and tax .

7.3 FINDINGS ON PERFORMANCE OF LIQUIDITY MANAGEMENT OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

- **Current Ratio** -In manufacturing and service sector of SMEs ,all units displays the SMEs have sound liquidity position in short term during the study period. There was a fluctuating trend in the current ratio, over the study period due to the locking up of

current assets and a little settlement of current liabilities from 2010 to 2015 in both manufacturing and service sector of SMEs. Under modern financial management, increasing current assets contributes to 'necessary evils'. Higher current asset contributes only negatively to the profitability of a business. Ganga pharmaceutical ltd has 2.54 times, Valiant organic ltd current ratio of 2.17 times, this is sign of mismanagement of current assets. In service sector, Comfort Commotrade ltd and Jupitor info media ltd also reflects increasing trend. It is also found that the current ratio of all the selected automobile companies marked in fluctuating trend. This situation indicates the inconsistence performance as well as no fix policy regarding current assets.

Kruskal Wallis test Table 6.8.2 A) and 6.9.2 A) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average current ratio is significantly different across SMEs of both manufacturing and service sector.

Regression analysis table 6.13.1 B) and 6.13.2 B)concludes current ratio has least direct impact on the return on capital employed.

- **Quick ratio** -There was a decrease in the liquid ratio due to the lack of overdrafts and the heavy increase of other components. It is assumed that the current liabilities are equal to the liquid liabilities as there were no overdrafts during the study period. Manufacturing sector SMEs have lower quick ratio compare to service sector as the major issue

  Kruskal Wallis test Table 6.8.2 B) and 6.9.2 B) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

  t test table 6.11 reveals that concludes average current ratio is significantly different across SMEs of both manufacturing and service sector. This is majorly due to higher investment in inventory in manufacturing sector.

Regression analysis table 6.13.1 B) and 6.13.2 B) concludes Quick ratio has least direct impact on the return on capital employed.

- **Cash to Current Asset ratio-** The average of Manufacturing sector broadly lies within the range of 6 percent to 10 percent wherein the service sector within 17 percent to 29 percent. Manufacturing sector SMEs follow too much conservative policy in case of liquidity.

  Kruskal Wallis test Table 6.8.2 C) and 6.9.2 C) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

  t test table 6.11 reveals that concludes average cash to current asset ratio is significantly different across SMEs of both manufacturing and service sector. This is majorly due to higher investment in inventory in manufacturing sector.

  Regression analysis table 6.13.1 B) and 6.13.2 B)concludes that in Manufacturing sector Cash to current asset ratio has direct positive impact on the return on capital employed in Manufacturing sector.

- **Current Assets to Total Assets Ratio-**This ratio in Manufacturing and service sector of SMEs shows decreasing trend which reflects better management of working capital. But still overall ratio in each case is more than 50 percent of total asset. The main reason, in such a case, may be heavy investment in inventory due to lacks of scientific inventory management, bigger size of accounts receivable due to liberal credit policy, idle amount of cash due to inefficient cash management.

  Kruskal Wallis test Table 6.8.2 D) and 6.9.2 D) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

  t test table 6.11 reveals that concludes average current ratio is significantly different across SMEs of both manufacturing and service sector. This is majorly due to higher investment in inventory in manufacturing sector.

Regression analysis table 6.13.1 B) and   6.13.2 B) concludes that in Service sector current asset to total asset ratio has direct positive impact on the return on capital employed in Manufacturing sector.

- **Liquid asset to current asset ratio-** Liquid asset to current asset is in the range of 89 percent to 92 percent in Service sector in Maharashtra during 2010-2011 to 2014-2015.In manufacturing sector, the range is between 89 percent to 92 percent during 2010-2011 to 2014-2015.

Kruskal Wallis test Table 6.8.2 E) and 6.9.2   E) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average current ratio is significantly different across SMEs of both manufacturing and service sector. This is majorly due to higher liquidity in Manufacturing than service.

Regression analysis table 6.13.1 B) and   6.13.2 B)concludes that in both Manufacturing and Service sector Liquid asset to current asset ratio have least impact on the return on capital employed .

7.4   FINDINGS ON PERFORMANCE OF WORKING CAPITAL MANAGEMENT OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

Working Capital Turnover ratio-Working capital trend Fluctuating and displays the lack of consistency, this is majorly due to fluctuating working capital. This ratio shows the alarming situation of SMEs as Working capital turnover ratio is decreasing over the study period. Few SMEs also have negative working capital which means their short-term debts outweigh their liquid assets.

Kruskal Wallis test Table 6.8.3 A) and 6.9.3   A) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average Working capital turnover ratio is across SMEs of both manufacturing and service sector is similar. Both the sectors face the similar issues in case of working capital compare to sales which is low .

Regression analysis table 6.13.1 C) and   6.13.2 C)concludes that in both Manufacturing capital turnover ratio has direct positive impact. Hence to increase the Return on capital employed turnover ratio must be improved.

- **Sales to Current asset ratio-**In case of Manufacturing sector, SMEs displays the growing trend .In case of service sector, sales to current asset displays the lack of consistency.

  Kruskal Wallis test Table 6.8.3 B) and 6.9.3   B) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

  t test table 6.11 reveals that concludes average Sales to current asset ratio is across SMEs of both manufacturing and service sector is similar.

  Regression analysis table 6.13.1 C) and   6.13.2 C)concludes that in Manufacturing Sales to current asset ratio has direct positive impact. Hence to increase the Return on capital employed in manufacturing sector sales to current asset ratio must be improved.

- **Debtors turnover ratio** Debtors are the largest part of current asset of SMEs in both the sectors in Maharashtra, It is next to cash and bank balances. In case of Manufacturing sector all selected SMEs reveal increasing trend which is positive sign. It shows that increasing debtors are matching with sales of unit and careful credit policies are framed . It is observed that though the sales and debtors increased simultaneously, the rate of increase was more in the latter than the former during the first part of the period study. As a result the rate of Debtor turnover declined and the collection period increased.

In service sector, Cawasji Behramji catering service ltd. and Mitcon Consultancy & engineering service ltd displays decreasing trend of Debtors Turnover Ratio ,this is possible in small sale base unit comprising of only a few large customers, often suffer from low debtors turnover ratio. As large customers are not prompt to pay up ,by virtue of their command over suppliers, they can afford to delay payments and enjoy implicit free financing of their inventory.

Kruskal Wallis test Table 6.8.3 C) and 6.9.3 C) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

- t test table 6.11 reveals that concludes average Sales to current asset ratio is similar across SMEs of both manufacturing and service sector .

- Regression analysis table 6.13.1 C) and   6.13.2 C)concludes that in Manufacturing Debtors turnover ratio has negative impact. Hence to increase the Return on capital employed in manufacturing sector sales to current asset ratio must be improved.

- **Credit strength ratio**-"A credit strength ratio between 1.75 to 2.0 provides a reasonable cover and control against undue expansion of short term credit without making the firm too conservative."[113]In case of Manufacturing sector and service sector, All selected SMEs are within the range of 1.75 to 2.0 except in Bajaj health care ltd, the average ratio is 2.67,Cawasji Behramji & engineering service ltd is 3.15,Creative Peripherals & Distribution ltd is 2.86, this indicates a higher than desirable dependence on current liabilities ,which may turn out to be dangerous it the company does not have enough asset margins to fall back on .

Kruskal Wallis test Table 6.8.3 D) and 6.9.3   D) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

- t test table 6.11 reveals that concludes average Credit strength ratio is similar across SMEs of both manufacturing and service sector

- Regression analysis table 6.13.1 C) and   6.13.2 C)concludes that in both Manufacturing and service sector credit strength ratio has impact. Hence to increase

the Return on capital employed in manufacturing sector sales to current asset ratio must be improved.

- **Interest coverage ratio**-"A very low Interest coverage ratio i.e less than 2,may indicate a risk prone management with highly geared capital structure or it simply means that loan funds are not paying their way" In case of Manufacturing sector, Baja healthcare ltd and Patdiam jewellery ltd has low ratio during study period. In case of Service sector, only Creative Peripherals and Distribution ltd has low ratio 1.69 times. High ratio reveals risk averse management .In case of Manufacturing sector has 21 times ratio .In case service sector, DRA consultancy ltd 43.76 times , Comfort common Trade ltd has 1168 times ratio, Mitcon Consultancy & Engineering services ltd has 167 times which shows the SME uses free market credit than interest bearing loans.

7.5 FINDINGS ON PERFORMANCE OF PROFITABILITY OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

- Net Profit Ratio -Operating margin is used to measure company's pricing strategy and operating efficiency. It gives an idea of how much a company makes (before interest and taxes) on each rupees of sales. The range between service sector SMEs and manufacturing sector is approximately a similar trend 16% to 24%.

   Kruskal Wallis test Table 6.8.4 A) and 6.9.4   A) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

   t test table 6.11 reveals that concludes average Net profit ratio is similar across SMEs of both manufacturing and service sector

- **Return on Capital employed** -Return on Capital employed of SMEs in Manufacturing Sector is in the range of 21 percent to 31.4 percent .SMEs in service

sector is in the range of 23 percent to 33.71 percent. Overall SMEs shows erratic and negative trend. Few SMEs also reveal reveals decreasing profits the reason can be In recent years the decline in EBIT was more than the decline in assets, This indicates these units has not been designing its investment policy depending upon its capacity to earn profits.

Kruskal Wallis test Table 6.8.4 B) and 6.9.4 B) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average Return on capital employed ratio lies in the similar range across SMEs of both manufacturing and service sector

- Net profit to total asset ratio-The return on asset analysis conducted in the study reveals that Manufacturing sector SMEs have shown the Downbeat tendency during 2013-2014 and then has shown the positive trend in the performance of profitability ratios during 2014-15 .Service sector SMEs shows the negative trend which is the area of concern and increase of sales or effective utilisation of asset plans should be implemented in few SMEs in service sector.

Kruskal Wallis test Table 6.8.4 C) and 6.9.4 C) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average net profit to total asset ratio lies in the similar range across SMEs of both manufacturing and service sector.

- **Return on net worth** indicates how well the company has used the resources of the owners. On making an analysis of the performance of the selected SMEs the return on net worth marked in fluctuating trend during the period of study. Return on net worth of SMEs are fluctuating .as the average ratio is more than minimum 27.54 percent in service sector and 32.45 percent in Manufacturing sector .this indicates the SMEs have good opportunity of growth .

Kruskal Wallis test Table 6.8.4 D) and 6.9.4 D) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average Return on Net worth ratio is varying across SMEs of both manufacturing and service sector .

- Return on Capital employed   - Overall SMEs have decreasing and erratic trend of Return on Capital employed   over the study period. Return on capital employed ratio measures the profitability of a company by expressing its operating profit as a percentage of its Net worth   . From the analysis it is to be found that return on Net worth   below than 50% in all the selected SMEs. It suggests inability to earn reasonable profits. However, no standard norm for this ratio is suggested. Accordingly, all the selected SMEs should try to maintain this ratio up to 50% because its point to well-organized use of funds. This reflects that the size of sales is not justifying the size of investment by shareholders.

Kruskal Wallis test Table 6.8.4 E) and 6.9.4   E) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes Return on Capital employed ratio lies in the similar range across SMEs of both manufacturing and service sector.

7.6 FINDINGS ON PERFORMANCE OF CAPITAL STRUCTURE OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

- **Debt equity ratio** "In India, The average debt equity ratio across industry was to be found between 1.5 to 2 ."(Madan ,1978)[114] The debt-equity ratio on an average was higher than the generally accepted standard norm of 1:1 in five out of the selected sample units. It may be inferred that the units have preferred to use more short-term loans and advances to meet their current obligations year after year. Since the trend of the debt-equity ratio registered a decline, it may be said that an increasing proportion of debt was employed every year. However increasing employment of loans did not maximise the earnings to equity shareholders which is evident from the interest-coverage ratio. In other words, SMEs were trying to increase the profits with the use of less cost of source of funds. In other words, the industry did not follow a uniform policy of raising funds from borrowing and net worth. In the same way, the debt equity ratio was not consistent due to changes in the debt and equity capital proportions. From the creditor's point of view, the long-term financial strength was poor. Service sector in SMEs more dependent on own funds than borrowed funds, service sector is between 0.55 to 0.79 and manufacturing sector is between 0.65to 0.82 .The ability to pay off its fixed interest commitments was very sound.

  Kruskal Wallis test Table 6.8.4 E) and 6.9.4 E) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

  t test table 6.11 reveals that concludes Return on Debt to equity ratio lies in the similar range across SMEs of both manufacturing and service sector.

- **Total debt to Equity ratio** is much higher than long term debt equity ratio, this indicates reliance of SMEs on short term financing. long term financing can also provide SMEs with tax shield.

  Kruskal Wallis test Table 6.8.4 E) and 6.9.4 E) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes Total Debt to Equity ratio reveals the difference across SMEs of both manufacturing and service sector.

- **Total Debt to Total asset-**This ratio indicates that overall SMEs of manufacturing and service sector finance total assets mainly through their own funds. This can be due to less financing option or lack of awareness regarding the various options of expanding their business. There can be more reason of low market share.

  Kruskal Wallis test Table 6.8.4 E) and 6.9.4 E) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

  t test table 6.11 reveals that concludes Total debt to Total Asset ratio reveals the difference SMEs of both manufacturing and service sector.

- **Fixed assets utilisation Index** –"This index should be more than one indicates company utilising it fixed assets efficiently."[115] All selected sample manufacturing SMEs reflects effective utilisation as it is higher than 1.In services sector ,Only Suyog Telematics ltd and Jupitor info Media ltd which shows the average fixed asset index 0.76 and 0.61 respectively .This is due to both the SMEs have invested in fixed asset exorbitantly compare to sales.

7.7   SPRINGATE MODEL

As can be seen from the 6.7 A) and 6.7 B) table five companies out of the 12 selected companies seem to be heading towards bankruptcy. These have been highlighted in red. The Z score of these companies is less than 0.862 in four years or more. As a result even the average Z score is less than 0.862.

The companies heading towards bankruptcy are as follows :

- Bajaj Healthcare Ltd
- Ganga pharmaceuticals ltd

- Suyog Telematics ltd

- Comfort Commotrade ltd

- Jupiter info media ltd

Out of these, Bajaj healthcare and Suyog telematics are Medium companies, whereas the other four are small companies.

Analysis of the reasons

The reasons behind the Z score are as follows

- In case of Bajaj healthcare, the major reason is that they have a negative working capital. Due to high current liabilities and negative working capital both x_1 (working capital/total assets) and x_3 (PBIT/ Current liabilities) have a negative and low value respectively which has brought down the Z score. However the last year under study i.e. 2014-15 the score has increased. The average Z score is above 0.7 hence it appears the company has improved and since it is already quite profitable, Bajaj healthcare may be considered quite solvent in long term.

- In case of Suyog telematics, the working capital is negative in 3 out of 5 years, thus causing a decline in x_1 (working capital/total assets)variable. Further the x_4 variable (sales/ total assets) is also quite low i.e. 0.5, because of which the Z score has declined. However the same has picked up in the last year 2014-15 which has brought the average Z score to more than 0.7. It may therefore be concluded that Suyog Telematics also seems to be out of the danger of insolvency.

- Ganga pharmaceuticals Ltd has low working capital, earned very less profits and also a very low turnover. As a result their Z score is less than the threshold in all the five years. The x_2 (PBIT/Total assets)variable , which is the return on total assets is less than 1% due to very low profits. Similarly the x_3 variable - EBIT/CL is also less than 5%. The Sales / TA is around 0.5 which is quite low causing a decrease in x_4(Sales/ Total assets). The overall Z score is 0.49 and therefore the company is definitely moving towards bankruptcy, unless something is desperately done to improve profitability and sales.

- In case of Jupiter Infomedia Ltd., the working capital is very low and negative in the last two years ie. The current liabilities are more than the current assets. Moreover, the return on total assets is around 1.5% only due to very low profits consistently in the last 4 years which brings down the x2(PBIT/Total assets)variable also. The sales turnover ratio x4 (Sales/ Total assets) is also too low which is 0.1 (less than 10% of total assets). As a result of this the Z score is less than the threshold for the last 4 years and the average Z score is 0.56. It has a potential of being insolvency firm.

- In case of comfort Commotrade ltd ,has low profit in the year 2012-13 and 2013-14 .Sales turnover Ratio is low in both the years i.e 12 percent of total asset and 19 percent of total asset which is very low .

Thus out of the twelve companies under study, three of the companies are likely to be bankrupt. The four companies are:

1. Ganga pharmaceuticals

2. Jupiter Infomedia Ltd

3. comfort Commotrade ltd

The above three SMEs are small companies i.e. having a total capital employed of less than 10 crore. Thus it may be concluded that SMEs with lower capital employed are more susceptible to becoming insolvent as they seem to have lesser strength to withstand competition and economic downturns.

7.8 OVERALL AVERAGE FINDING AMONG FINANCIAL PARAMETERS

As per the table 6.10 using t test concludes that there exists a real difference in average of Solvency, Liquidity, and Working capital across service sector and Manufacturing sector. On the other side Parameters viz. Profitability, capital structure are similar across service sector and Manufacturing sector. Manufacturing SMEs are better in liquidity and solvency as these units have back up of fixed asset investment and have higher long term investments compared to service sector.

7.9 OVERALL COMMENTS ON CORRELATION ANALYSIS AND TESTING OF HYPOTHESIS

SMEs in Manufacturing sector

As regards the correlation between the Solvency and Profitability (ROCE), we find that there is no significant positive relation between Fixed asset to long term funds Ratio and return on capital employed and between Degree of financial leverages and return on total assets at 5% level of significance with 25 degree of freedom. There is a significant positive relation between Long term debt to total asset ratio and return on capital employed .This implies that improvement in Long term debt to total asset ratio at the present level will significantly improve return on capital employed i.e. profitability. However, Fixed asset to long term funds Ratio and Degree of financial leverages does not have any such impact on profitability.

As regards the correlation between the Liquidity and Profitability (ROCE), we find that there is no significant positive relation between current ratio and return on total assets, between quick ratio and return on total assets and current asset to total asset Ratio at 5% level of significance with 25 degree of freedom. There is a significant positive relation Cash to current asset ratio and return on capital employed and Liquid asset to current asset Ratio to return on capital employed. This implies that improvement in Cash to current asset ratio and Liquid asset to current asset Ratio at the present level will significantly improve return on total assets i.e. profitability. However Current ratio, quick ratio (i.e. cash and bank balance here) , current asset to total asset Ratio does not have any such impact on profitability.

As regards the correlation between the Working Capital ratioand Profitability (ROCE), we find that though there is a positive relation, no such relation is significant at 5% level of significance with 25 degree of freedom. We observe that though all the working capital ratios, i.e. Working capital turnover Ratio, Credit strength ratio are not correlated to the profitability (ROCE).Hence, Sales to current Asset ratio to (ROCE) and Debtors turnover ratioto (ROCE) have slight positive relation with Return on capital employed. We can conclude that these ratio have relation between Working capital and profitability at 5% level of significance with 25 degree of freedom.

As regards the correlation between the Capital Structure and Profitability (ROCE), we find that though there is a negative relation, no such relation is significant at 5% level of significance with 25 degree of freedom. We observe that though all the capital structure ratios, i.e. Debt equity ratio, Total Debt to asset Ratio, are negatively correlated to the profitability (ROCE). Proprietary Ratio has no significant relation with profitability. Hence, we can conclude that there is relation between capital structure and profitability at 5% level of significance with 8 degree of freedom.

SMEs in service sector

As regards the correlation between the Solvency and Profitability (ROCE) of SMEs of service sector in Maharashtra**.**, we find that there is no significant positive relation between Fixed asset to long term funds Ratio and return on capital employed, Long term debt to total asset ratio and return on capital employed and between Degree of financial leverages and return on total assets at 5% level of significance with 25 degree of freedom. This implies that improvement in Long term debt to total asset ratio, Fixed asset to long term funds Ratio, Degree of financial leverages at the present level will significantly not improve return on capital employed i.e. profitability.

As regards the correlation between the Liquidity and Profitability (ROCE) of SMEs of service sector in Maharashtra**.** We find that there is no significant positive relation between current ratio and return on total assets, between quick ratio and return on total assets and current asset to total asset Ratio at 5% level of significance with 25 degree of freedom. There

is a significant positive relation Quick ratio and return on capital employed and cash to current asset Ratio to return on capital employed. This implies that improvement in quick ratio and cash to current asset Ratio at the present level will significantly improve return on total assets i.e. profitability. However Current ratio, cash to current asset (i.e. cash and bank balance here), cash to total asset Ratio does not have any such impact on profitability.

As regards the correlation between the Working Capital ratio and Profitability (ROCE) of SMEs of service sector in Maharashtra., we find that though there is a positive relation, no such relation is significant at 5% level of significance with 25 degree of freedom. We observe that though all the working capital ratios, i.e. Working capital turnover Ratio, sales to Current asset Ratio, Debtors turnover ratio are not correlated to the profitability (ROCE).Hence, Credit strength ratio to (ROCE) have strong positive relation with Return on capital employed. We can conclude that these ratio have relation between Working capital and profitability at 5% level of significance with 25 degree of freedom.

As regards the correlation between the Capital Structure and Profitability (ROCE) of SMEs of service sector in Maharashtra, we find that though there is a positive relation, no such relation is significant at 5% level of significance with 25 degree of freedom. We observe that though all the capital structure ratios, i.e. Debt to equity ratio, Proprietary ratio, Total Debt to asset ratio are slightly correlated to the profitability (ROCE), not a single relation turned out to be statistically significant. Hence, we can conclude that there is a relation between capital structure and profitability at 5% level of significance with 8 degree of freedom.

7.10 REGRESSION ANALYSIS OF FINANCIAL PARAMETERS AND PROFITABILITY (RETURN ON CAPITAL EMPLOYED)

SMEs of Manufacturing sector in Maharashtra

Regression analysis of Solvency and ROCE of Manufacturing sector in Maharashtra.

With reference to Table No 6.13.1 A)it is concluded that Long term debt to asset ratio and Financial leverage ratio is negatively related with Return on capital employed. If these two ratios are decreased return on capital employed can be increased in Manufacturing sector.

Regression analysis of Liquidity and ROCE of Manufacturing sector in Maharashtra.

With reference to Table No6.13.1 B) it is concluded that Cash to Current Asset ratio is positively related with Return on capital employed. If Cash to Current Asset ratio is increased return on capital employed can be increased in Manufacturing sector.

Regression analysis of working capital analysis and ROCE of Manufacturing sector in Maharashtra.

With reference to Table No6.13.1 C) it is concluded that Working Capital Turnover ratio , Sales to Current asset ratio ,Debtors Turnover Ratio and Credit Strength ratio are positively related with Return on capital employed.

If ratios viz.Working Capital Turnover ratio, Sales to Current asset ratio andCredit Strength ratio are increased return on capital employed can be increased in Manufacturing sector.

Regression analysis of Capital structure analysis and ROCE of Manufacturing sector in Maharashtra.

With reference to Table No6.13.1 D) it is concluded that Proprietary Ratio is positively related with Return on capital employed. If Proprietary Ratio is increased return on capital employed can be increased in Manufacturing sector.

SMEs of Service sector in Maharashtra

Regression analysis of Solvency and ROCE of Service sector in Maharashtra.

With reference to Table No 6.13.2 A)it is concluded that Fixed Asset to long term funds Ratio is positively related with ROCE and Financial leverage ratio is negatively related with Return on capital employed. If these Financial leverage ratio is decreased return on capital employed can be increased in Service sector. In order to increase return on Capital Employed Fixed Asset to long term funds Ratio should be increased.

Regression analysis of Liquidity and ROCE of Service sector in Maharashtra.

With reference to Table No 6.13.2 B)it is concluded that Current Asset to Total Asset Ratio is positively related with Return on capital employed. If Current Asset to Total Asset Ratio is increased return on capital employed can be increased in Service sector.

Regression analysis of working capital analysis and ROCE of Service Sector in Maharashtra.

With reference to Table No 6.13.2 C)it is concluded that Credit Strength ratio is positively related with Return on capital employed. If ratio Credit Strength ratio is increased return on capital employed can be increased in service sector.

Regression analysis of Capital structure analysis and ROCE of Service sector in Maharashtra.

With reference to Table No6.13.2 D)it is concluded that Proprietary Ratio is positively related with Return on capital employed. If Proprietary Ratio is increased return on capital employed can be increased in Service sector.

7.11 SUGGESTIONS

- The increasing trend of short-term funds is a matter of concern for all the sample units. The short-term creditors gradually acquired to more or less a permanent stake in all the units. Hence it is suggested to evade the use of short term credit for capital expenditure like capitalising fixed asset.

- SMEs are required to focus on smooth flow **cash** as idle cash and bank balance will lead to excess liquidity but further it is important to have flow of cash .A high current ratio may be due to improper management of current assets hence SMEs should try to manage its current asset i.e inventory and debtors.

- SMEs have fewer large companies as their customer as a virtue of their command over suppliers, they don't pay on time or delay payment. The range of net profit ratio among service sector SMEs and manufacturing sector is approximately a similar trend of 16% to 24%. The net profit margin in the sample units was meagre. Hence it is advisable to broader sales base.

- Service sector SMEs do not have long term debt which as ideal management it is good but with the practically even with strong visibility of growth, the company's low leverage could put it at a distinct disadvantage to its competitors, which utilise debt for furthering development.

- SMEs reflect high investment in current assets ,which may cause a 'Diversion 'of funds to non value added assets with its consequential negative impact on profitability. It is indispensable for SMEs to keep the adequate working capital management policy on top most ladder to achieve the success. SMES also face the low working capital turnover which is alarming situation for SMEs.

- Working capital should be financed mainly through short term funds .As SMEs tend to use long term funds for operational purpose which is sign of financial inefficiency . This can be due to lack of scientific inventory management, bigger size of accounts receivable due to liberal credit policy, idle amount of cash due to inefficient cash management.

- SMEs with lower capital employed are more susceptible to becoming insolvent as they seem to have lesser strength to withstand competition and economic downturns. Hence SMEs must enhance capital employed in longer run.

- Fixed Asset index depicts SMEs are efficiently utilising the fixed assets.

- SMEs should use optimum policy of financing .It should have balanced use of various options available for finance

- SMEs in both the sector follows the conservative policy regarding capital structure decision, this may be due to lack of credit worthiness with lending institution. SMEs have unutilised debt service capacity hence SMEs can change its debt equity ratio which apparently increase profit. SMEs should explore the possibility of obtaining finance being made available by various Government schemes encouraging technological development.

- SMEs should improve its Financial leverage ratio, SMEs can utilise its debt fund for expansion, can move towards risk taking attitude to earn higher profits.

- SMES average short term debt equity ratio is high, signifying on short term credit is used for financing. SMEs must plan long term plans for financing its fixed asset and apparently this will give avenue for expansion.

- SMEs reveal erratic and fluctuating return on capital employed ratio, this is sign of inefficient investment policies compare to the earnings of the business.

- Net profit on total asset ratio is erratic and low which is the concern factor .In total assets highest share is of debtors and idle cash .Managing the assets can improve this ratio.

- All the selected companies should try to maintain financial ratios at adequate level.

- Further, both the sectors are suggested to focus on receivables management either by reducing its proportion in current asset structure or by enhancing the efficiency through prompt collection efforts and restricted credit policy. The credit and collection policy of the business required be monitored continuously. The remaining

companies may adopt proper receivable control technique to improve the receivable management.

- The quantum of sales generated should be improved impressively in order to enjoy better per of the assets and capital employed.

- Further firms in SMEs are suggested to rely more on long term funds as compared to Current liabilities for financing their Current assets for improving earnings. The selected SMEs should try to match the amount of working with the sales trends. Where there is a deficit of working capital, they should try to build on adequate amount of working capital. Where, there is an excessive working capital, it should be invested either in trade securities or should be used to repay borrowings.

- Research & Development is an empirical means to achieve all the goals for a SME. They have internalized innovativeness and adaptability owing to their dynamic nature and agility to survive despite several challenges. If SMEs were to combine these attributes with action oriented Research & Development programs and government support, the rewarding outcome would certainly contribute to India's economy.

- It was indicated that few SMEs are found to be sick as their z score is less than 0.86 for most of the years during study. Hence the SMEs are suggested to have better working capital, reserves and surplus, Earning before interest and Tax and sales in relation to asset. Further SMEs are suggested to restructure capital structure to revamp the financial position internally.

To conclude the study it may be said that the adoption of the above measures will undoubtedly help the selected units to improve their overall performance. Short term and Long Term solvency position to be maintained properly which will ultimately enhance the liquidity and profitability of the selected companies. The SMEs will be able to generate funds from internal sources, thus breaking the various circles of financial stringencies. It is known that the maximum utilization of fixed assets as well as current assets will result in better financial performance. Hence, all the selected SMEs can follow the suggested makeover to improve their financial position and performance. Hence, with the efficient financial management ,the technological development and investment in research and development

can accelerate the growth of SMEs of Maharashtra Thus, the dream of our planners to accelerate the economic growth of the country will be fulfilled.

7.12 SCOPE OF FURTHER STUDY

Any research study can explore only a limited field of knowledge. There are many aspects that need to be researched further. So, in the present case also there is a scope for further research in the same paper industry. The researcher suggests the following areas for further research.

1. This study was restricted only to a few companies of SMES. Hence, studies could be under taken on other SMEs and a comparative across companies can also be attempted.

2. For further studies, other profitability ratios can also be considered other than the variables considered in this study may also be taken to account for predictor variables.

3. Determinants of corporate capital structure, cost of capital, risk return analysis, shareholders value added, dividend practices followed, leverage analysis and identify sick and healthy units separately can be studied in detail.

4. Regional wise comparative study among sectors of SMEs in the study area can also be considered for further study.

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EXECUTIVE SUMMARY

"AN ANALYSIS OF FINANCIAL FACTORS AFFECTING THE PERFORMANCE OF SELECTED SMEs WITH SPECIAL REFERENCE TO MAHARASHTRA STATE."

Small and Medium enterprises have a very important role to play in the Industrialisation as well as economy of the country. Keeping in view the importance of the small and medium sector the government of India has made considerable efforts to promote their growth .The SMEs form the backbone of the Indian manufacturing sector and have become engines of economic growth in India. Micro, Small and Medium Enterprise (MSME) development Act, 2006 came into from 2" Oct, 2006. The Act aims at facilitating the promotion and development of Micro, Small and Medium Enterprises as well as ensuring their competitiveness and smooth flow of credit to them as well as minimizing instances of sickness among them.

Small & Medium Business Development Chamber of India projects the share of SMEs in the expansion of the Indian economy to increase to 40 per cent of the Gross Domestic Product in 2017. This assessment is supported by its supposition that by 2016 - 17 approximately 15 million additional people would be joining the SME sector. SME units have currently employed 1,117.32 lakhs people in the year 2014-15. As per All India census of MSMEs, share of MSME manufacturing output in total manufacturing output is 33.40% in 2014-15.

Maharashtra contributes approximately 6 percent of total registered functioning SMEs in India. The main objective of conducting this study was to obtain the in depth details of financial factors affecting the performance of SMEs in Maharashtra. The research targeted SMEs enterprises in Maharashtra and the unit of analysis comprised owners-managers of various sectors manufacturing businesses, training, healthcare, consultants, hospitals, hotels, jeweller, trading and finance.

The present position of financial performance of SMEs, their operational efficiency, the challenges they face can best be studied using descriptive research. Hence statistical tools viz. Kruskal wallis test,t test ,correlation, regression is applied to evident the findings. Comprehensive Index is used to make the data on similar platform for comparison purpose. Audited financial statements of SMEs are collected and summarised for the purpose of analysis. SMEs preserve the Authentic financial data for limited years hence using five years

accounting year in depth study have been conducted to understand overall picture of selected SMEs. Samples are selected from Bombay stock Exchange of SMEs (BSE SME Exchange) , established in 2012 as a platform for issuing shares and Equity financing .Out of 70 of total SMEs listed on BSE SME Exchange sample of 12 was identified by lottery method. These 12 selected SMEs were further divided in Manufacturing and service sector for in depth understanding of SMEs and inter sector comparison.

This study is helpful in short-term and long-term prediction of the trajectory of growth by means of financial performance analysis. Internal factors like financial parameters, viz., Solvency, Liquidity, working capital, capital structure, Profitability etc also plays an important role for the growth of SMEs. The study of these Financial parameters helps in identifying the financial strong points and weaknesses of the SMEs by properly studying the relationship between the items of balance sheet and profit and loss account.

To sustain in the competitive market SMEs will have to be viable and profitable, which will help the national economy grow and further develop. The study has covered the financial challenges faced by the SMEs and measured the financial performance of the same. The results of the study are generalizable to the SMEs in Maharashtra. In the first chapter, overview of SMEs in India is given and research design is described in detail.

In the second chapter, Profile of Maharashtra is discussed in detail in context with industry and overview of SMEs in Maharashtra

In the third chapter review of literature reveals That though many studies on the small-scale industries have been carried out in India as well as abroad, yet no comprehensive study is devoted to analyze the effect of financial factors on SMEs feat in Maharashtra.

In the fourth chapter, all selected sample is described by their market product and financial aspects of selected SMEs are describe in detail.

In the fifth chapter , conceptual framework applied in the study is described in a theoretical manner.

In the sixth chapter, all the financial parameters are presented and analysed using financial and statistical tools.

In the seventh chapter all the findings and suggestions are summarised in a systematic pattern

The study can be concluded as the SMEs are able to generate funds from internal sources, thus breaking the various circles of financial breakdowns is essential. This study deals with the financial appraisal of the SMEs, which evaluates past, current and projected performance and, thus, is intended to give a picture of the overall growth of financial performance of the SMEs in Maharashtra.

It is known that the maximum utilization of fixed assets as well as current assets will result in better financial performance. Hence, all the selected SMEs can follow the suggested makeover to improve their financial position and performance. With the efficient financial management, the technological development and investment in research and development can accelerate the growth of SMEs of Maharashtra Thus, the dream of our planners to accelerate the economic growth of the country will be fulfilled.

"An analysis of financial factors affecting the performance of selected SMEs with reference to Maharashtra state"

A Synopsis Submitted to

THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

For the degree of

DOCTOR OF PHILOSOPHY

(Accounting and Financial Management)

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Content

1   Introduction

1.1   Background MSMEs in India

Indian Small and Medium Enterprises (SME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. SMEs 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 areas. SMEs are complementary to large industries as ancillary units and this sector contributes enormously to the socio-economic development of the country. The Sector consisting of 36 million units, as of today, provides employment to over 80 million persons. As per Annual report MEMEs 2014-15"The Sector through more than 6,000 products contributes about 8% to GDP besides 45% to the total manufacturing output and 40% to the exports from the country." The SME sector has the potential to spread industrial growth across the country and can be a major partner in the process of inclusive growth.

SMEs also play a significant role in Nation development through high contribution to Domestic Production, Significant Export Earnings, Low Investment Requirements, Operational Flexibility, Location Wise Mobility, Low Intensive Imports, Capacities to Develop Appropriate Indigenous Technology, Import Substitution, Contribution towards Defense Production, Technology – Oriented Industries, Competitiveness in Domestic and Export Markets thereby generating new entrepreneurs by providing knowledge and training.

1.2 Definition of MSMEs:

The Government of India has revised the definition, of small scale industries over the years, presently as per the enactment of the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 in terms of which the definition of micro, small and medium enterprises are as under Table

Table -:Micro, Small and Medium Enterprises Development (MSMED) Act, 2006

Enterprises	Manufacturing	Services
Micro	Upto Rs. 25 lakhs	Upto Rs. 10 lakhs
Small	Between Rs. 25 lakhs to Rs. 5 crores	Between Rs. 10 lakhs to Rs. 2 crores
Medium	Between Rs. 5 crores to Rs. 10 crores	Between Rs. 2 crores to Rs. 5 crores

Source: Ministry of MSME

1.3   SMEs ARE THE BACKBONE OF INDIAN ECONOMY

Small and Medium Enterprises (SMEs) have played a vital role in India's economic growth. With over 30 million units, manufacturing SMEs accounted for 6.11 per cent of the country's GDP in 2014-15 and MSME service sector in Gross Domestic Product is 24.63 percent, In all total MSME sector contribution in GDP is 30.75% in the year 2014-15. Small & Medium Business Development Chamber of India projects the share of SMEs in the expansion of the Indian economy to increase to 40 per cent of the GDP in 2016. The estimate is backed by its assumption of 15 million additional people joining the SME sector over the period 2016-17; SME units currently employ 1,117.32 lakhs people in the year 2014-15.As per All India census of MSMEs ,Share of MSME manufacturing output in total manufacturing output is 33.40% in 2014-15.[1]

MSME Sector plays critical role in the industrial development of any economy as could be seen in the historical records of presently developed countries. These units act as ancillary units and provide processed raw material to advanced industrial units. Thus the quality of final products of advanced industrial units, to a large extent, depends on the material supplied by MSME units. In addition to this, these units also provide unskilled and semi-skilled labor to these advanced industrial units. Several MSMEs also directly produce and supply final products to consumers also. If these MSMEs receive continuous demand orders from domestic and export markets then it may give such a platform to these MSMEs that many of them by stepping up improve their status as advanced industrial units. And thus take the economy to the path of industrial development.

1.4   The performance of MSMEs in India

The government as well as NGOs has been actively involved in this endeavor. With improving skills, better coordination with bigger firms and greater technological access, MSMEs in India have moved into a higher curve of success. The sector currently produces more than 6,000 quality products, ranging from handloom saris, carpets and soaps to pickles and machine parts, for huge industries targeting domestic and international markets.

Market Value of Fixed Assets (Rs. in crore)

868543.79 920459.84 977114.72 1038546.08 1105934.09 1182757.64 1268763.67 1363700.54 1471912.94

2006-07 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15
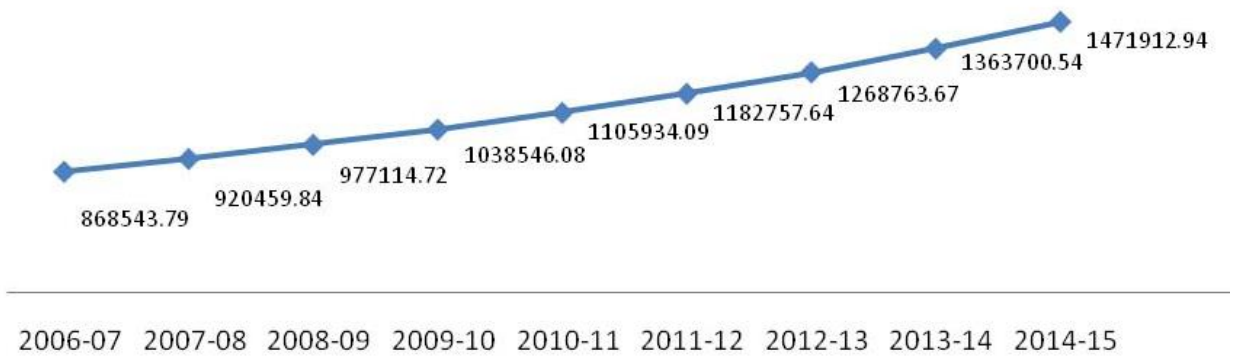
Sources-MSME Report

According to the Ministry Of Micro, Small and Medium Enterprises, the number of MSME units in India has grown at a CAGR of 4.5 per cent during FY07 –FY11, and stood at 31.2 million at the end of FY11. The cumulative investments in these units rose at a CAGR of 11.5 per cent during the same period. Strong growth in total investments in MSMEs indicates towards their expanding footprint and growing importance. The MSMEs are increasingly contributing towards employment generation in India. The number of people employed by MSME has grown to 73.2 million during FY11 ,in the year 2014-15 it counts to 1471912.94 crore.

Employment (in lakh)

805.23 842 880.84 921.79 965.15 1,011.69 1,061.40 1,114.29 1,171.32

2006-07 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15
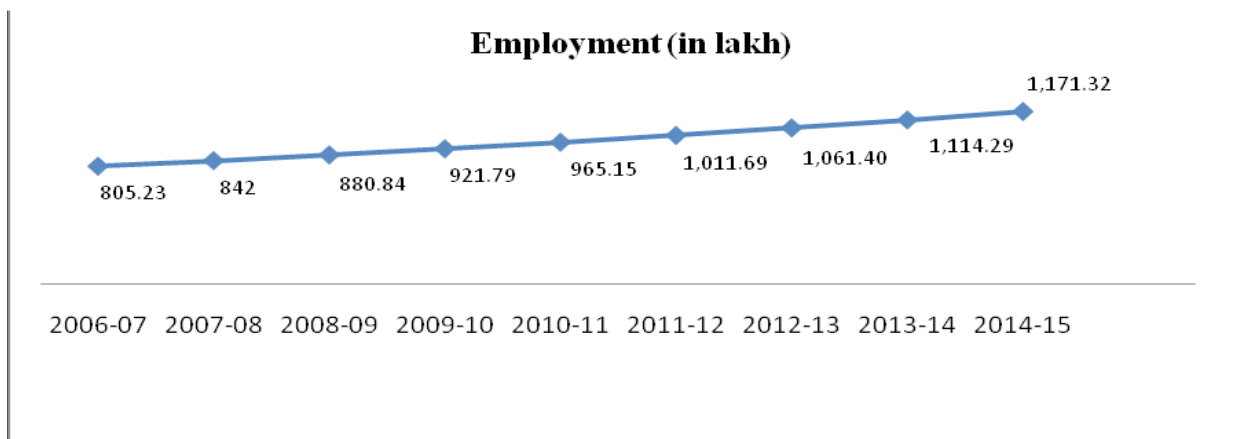
Sources-MSME Report 2016-17

2   Review of literature

A) Sudhansu Sekhar Nanda in his paper states that
The Micro,Small and Medium Enterprises (MSMEs) contribute to economic development in various ways, such as creating employment opportunities for rural and urban population, providing goods & services at affordable costs by offering innovative solutions and sustainable development of the economy as a whole. SMEs in India face a number of problems - absence of adequate and timely banking, finance, non-availability of suitable technology, ineffective marketing due to limited resources and non availability of skilled manpower.

B) Bala Subrahmanya (2004) highlighted the impact of globalization and domestic reforms on small-scale industries sector. The study stated that small industry had suffered in terms of growth of units, employment, output and exports. The Researcher highlighted that the policy changes had also thrown open new opportunities and markets for the small-scale industries sector. He suggested that the focus must be turned to technology development and strengthening of financial infrastructure in order to make Indian small industry internationally competitive and contribute to national income and employment.

This study provided several insights on the relationship between financial management practices and SMEs financial performance. Here author argued that this relationship is mediated by various financial planning capabilities not straight forward. The researcher has proposed several hypothesis concerning financial forecasting & budgetary Planning, working capital availability, financial reporting and analysis, inventory management capabilities, and all were empirically

validated the same. One reason why financial forecasting & budgetary planning capabilities contributed most to the financial performance because of pre-hand estimation of required funds, revenue and cost and it makes it one of the most crucial aspects of financial performance. While working capital availability, financial reporting & analysis capabilities also contributed significantly as expected, but the slight contribution of inventory management capabilities is beyond belief.

C) Choudhary,Vikas Motiram states in his research The Indian small enterprises must embrace change if they have to survive and find a place for themselves in the global competitive environment. Pertinent changes need to be worked out not only in the attitude of the stakeholders but also in the mindset of the institutions which are engaged in the task of development of small enterprises. 33 percent of the enterprises in Marathwada Region were highly successful companies, 26.66 per cent were moderately effective, and however 40 percent of the respondents maintained that they were not highly successful but sustaining in the business

2.1 LITERATURE REVIEW ANALYSIS

The foregoing reviews of existing literature on the subject reveal that though a large number of studies on the small-scale industries have been conducted, yet no comprehensive study is devoted to analyze the impact of financial factors on SMEs performance in Maharashtra state.
In order to avoid the inclusion of irrelevant material in this chapter, Researcher has segregated into three parts

1   The international studies related to SMEs in other countries except India
2   Studies related to Indian industry and SMEs and SMEs in Maharashtra
3   Studies related to financial factors affecting industry performance

3 NEED OF THE STUDY

Literature review indicates that SMEs play an important role in the economy of many countries across the globe, be they developed or developing Nations. However, SMEs have been said to report high rate of failures with many enterprises dying at an infant stage. Very few of the SMEs grow to become big enterprises. The reason to this failure is pegged on the various factors that continue to impose stagnation of the industry in terms of performance. They include: lack of access to credit, regulatory framework, management issues, market barriers and education and training. Therefore this study is aimed at investigating the factors affecting the performance of SMEs enterprises within Maharashtra in India. Such research gaps has necessitated to study on the subject.

State-Wise Distribution of Registered Working Small Scale Enterprises

	No of Enterprises	Employment	Original value of plant & machinery (in Rs. crore)	Market value of fixed investment (in Rs. crore)
Maharashtra	86586	1088790	12384.89	54365.37
India	1563974	9309486	105024.61	449138.40

Sources-MSME Report-2015-16

State/Union Territory-wise number of sick MSMEs (Number of sick MSMEs at the end of March)

	2011	2012	2013	2014	2015
Maharashtra	8,815	10,136	31,322	43,411	50,006
India	90,141	85,591	2,47,289	4,68,397	5,16,619

Source-Ministry of MSME report

As per Times of India article dated Jul 25, 2015The number of sick micro, small and medium enterprises (MSMEs) in Maharashtra has increased by 15.19% during financial year 2014-15 as compared to 2013-14. The state has the second highest number of sick industries in the country after Uttar Pradesh.

4 RESEARCH PROBLEM

In the research, researcher analyzed the factors influencing the performance of SMEs with special reference to Maharashtra state.

Maharashtra contributes 8.34% of sick enterprises, in the recent years. A number of emerging issues are posing serious challenges to the small and medium sized enterprises (SME's) in Maharashtra.

Hence, these enterprises enter the new era, dramatic challenges begun such as

        a. Capital structure,

        b. Financial constraints

        c. High turnover

        d. Working capital management

        e. Sources of funds

        f. Taxation policies

        g. Inventory management

Thus understanding the problems and challenges are fundamental solutions to expand and strategize SME's for future progress and effective financial performance.

FINANCIAL PERFORMANCE ANALYSIS - In the study financial factors are analysed to comprehend the financial performance of Small medium enterprises.

Financial performance analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of balance sheet and profit and loss account. It also helps in short-term and long-term forecasting and growth can be identified with the help of financial performance analysis. The relationship between the items in the balance sheet and profit and loss account are analyzed for determining the financial strength and weakness of the firm. It is the process of scanning of the financial statements to judge profitability, solvency, stability, growth and prosperity of a firm. the present study deals with the financial appraisal of the SMEs, which evaluates past, current and projected performance and, thus, is intended to give an accurate picture of the financial condition of the SMEs in Maharashtra. Hence, the statement of problem chosen has been titled as **"An analysis of financial factors affecting the performance of selected small and medium enterprises in Maharashtra state."**

5 OBJECTIVES OF THE STUDY

1   To examine the current position of the small and medium enterprises in Maharashtra.

2   To analyze the financial factors faced by SMEs in Maharashtra

3   To study the growth of selected SMEs.

4   To study the ability of the selected small and medium enterprises through analysing the financial strength and capital structure of selected small and medium enterprises.

5   To analyze the efficiency of financial management in SMEs of Maharashtra.

6   To analyse the working capital position of the selected small and medium enterprises through ratio analysis.

7   To find out the best optimum financial policies in favor of SMEs.

6 RESEARCH DESIGN

The procedure to be adopted for the study as under:-

6.1 METHODOLOGY

This is a micro study of the financial performance of the Micro, small and medium enterprises in Maharashtra. It attempts to evaluate the financial stability and operational health of the textile mills. The research study also attempts to analyse and interpret the financial performance and operations by employing ratio analysis techniques. The data from published sources i.e annual reports is the base for ratio analysis. For the purpose of data analysis, simple mathematical and statistical techniques such as, percentages, ratios, mean, standard deviation etc. were used. Correlation and regression analysis were applied to examine data and draw conclusions about the financial relationships among existing variables. Correlation analysis is used to measure the degree of association between two financial variables. Application-specific computer software has been used for graphical presentation of data wherever found appropriate. For the purpose of evaluating the performance of SMEs under study, Annual Financial Reports of the units were of great importance, which give host of economic information.

6.2 SELECTION OF SAMPLE:-

The main objective of conducting study was to obtain the in depth details of financial factors affecting the performance of SMEs in Maharashtra. The research targeted SMEs enterprises in Maharashtra and the unit of analysis are from various sectors i.e manufacturing businesses, training, healthcare, consultants, hospitals, hotels, jeweler, trading and finance, Information and Communication Technology sector.

The technique used for the selection of sample was descriptive sampling .The main reason of selecting these units was its feasibility in terms of time and cost and as it is concern with financial aspects of the company as the biggest constrain is to gather the financial declarations from companies. This study is chiefly based on the annual audited balance sheets, profit and loss account, cash flow statements, official records of the SMEs and annual reports and other records published by the company, the time frame of the study is five years i.e. from 2010-2011 to 2014-2015. Twenty Small and medium enterprises are selected for present study. The study attempts to cover a period of five years from 2010-2011 to 2014-2015.The reason behind the selection of this period span is recent years till the starting of research work and appropriate for study. Sample is taken from small and medium size companies situated in the region of Maharashtra state.

The selected industrial companies for the purpose of the present study are given as follows:-

1) Bajaj Healthcare Ltd

2) Filtra consultants & engineers ltd

3) DRA Consultants Pvt Ltd

4) Ganga pharmaceuticals ltd

5) Karnavati finance limited

6) Mahabir metallex limited

7) SPSS finquest pvt ltd

8) Valiant organic ltd

9) Agrimony commodities limited

10) Suyog Telematics ltd

11) Comfort Commotrade ltd

12) Jupiter info media ltd

13) Vidli Restaurants ltd

14) Cawasji behramji catering services limited

15) Diggi multitrade limited

16) Global space technologies ltd

17) Mitcon consultancy & engineering services limited

18) Creative Peripherals and Distribution Limited

19) Ashapura intimates ltd

20) Patdiam Jewellery ltd

1) BAJAJ HEALTHCARE LIMITED

Company was incorporated as Bajaj Healthcare Private Limited on July 15, 1993 under the Companies Act, 1956, with the Registrar of Companies, Mumbai . Bajaj Healthcare Limited is a pharmaceutical company with manufacturing and marketing capabilities in Active Pharmaceutical Ingredients (APIs), Intermediates and Finished Dosage Formulations (FDFs) with focus on Vitamins, Amino Acids, Anti-Convulsants and Finished Dosage Forms (FDFs) catering to various therapeutic segments.

Company's present product portfolio consists of various APIs in the therapeutic categories of Neutraceutical (Amino Acids), Vitamins, Anti-Convulsants, and Bactericidal & Bacteriostatic, Diuretic & Vasodilator, and Mineral & Nutritional supplements, Bronchodilater / Anti-asthmatic and Nootropics.

Financial Summary of Bajaj healthcare limited

Rs in thousands

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	11,98,605.00	14,15,005.00	17,07,786.00	20,49,067.00	21,83,017.00	414505.9977	17,10,696	82
Total Expenditure	11,52,289.00	14,05,565.00	17,24,345.00	20,17,170.00	20,63,595.00	392528.4536	16,72,593	79
Profit After Tax	42,106.00	6,502.00	-10558.00	19,714.00	75,148.00	33276.89272	26,582	78
Total Current assets	5,35,294.00	6,25,938.00	7,15,025.00	8,64,854.00	7,92,896.00	130780.5508	7,06,801	48
working capital	-79,803	-1,08,208	-1,28,325	-128319	-52495	32919.07496	-99,430	-34
Inventory	1,97,593.00	1,78,306.00	1,62,516.00	2,32,034.00	1,80,811.00	26461.06053	1,90,252	-8

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	14.78	2.23	-3.76	6.56	20.00
Return on capital employed (PAT\cap employed)	4.07	0.54	-0.81	1.36	5.15
Return on net Asset (EBIT/NA)	9.73	4.72	3.66	7.21	13.65
Financial leverage (PAT/EBIT)	41.81	11.33	-22.02	18.80	37.75
Profit margin(EBIT/Revenue from operations)	**8.40**	**4.05**	**2.81**	**5.12**	**9.12**
Asset turnover (sales/Net Asset)	115.79	116.48	130.37	140.91	149.68

source-Annual reports of selected MSMEs

Bajaj healthcare limited is Pharmaceutical sector company, revenue from operation of company has increased by 82%in the year 2014-15.profit after tax of the company is inconsistent .Average current assets of company is Rs. 6,06,801.Working capital shows the short term solvency which is negative from the year 2010-2011,hence average working capital is negative.

Return on equity is positive .return on capital employed is increasing. Financial leverage of the company is also high. Financial performance of the company is increasing.

2) FILTRA CONSULTANT AND ENGINEERING LTD

Company headquartered in Mumbai was incorporated in the year 2011 and is a player in water treatment industry focusing on providing strategic and technical support to OEMs for Water Treatment Plants, RO plants and user of these plants. Company had initially commenced its business in Mumbai and later on it expanded its cliental base by setting up branches in Pune,

Ahmedabad and Nagpur. Company also exports products and provide strategic and technical support to our clients in Malaysia, Dubai and Africa.

Company acts as authorized distributors of manufacturers of components used in water Treatment Industry. Major distribution arrangements are cited below:

Authorized distributor of HM DIGITAL Inc., Korea for providing hand held type Water Testing Instruments.

Financial summary of Filtra consultant and engineering ltd

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	88,487.00	2,70,569.00	2,45,346.00	2,75,524.10	3,75,834.55	103694.7	2,51,152.13	324.7
Total Expenditure	76,518.00	2,53,066.00	2,27,879.00	2,66,699.68	3,58,854.21	102256.4	2,36,603.38	369.0
Profit After Tax	8,101.00	11,788.00	11,802.00	5,935.59	13,531.19	3113.317	10,231.56	67.0
Total Current assets	1,73,106.00	5,35,423.00	4,85,027.00	5,48,159.37	7,48,219.95	207515.6	4,97,987.06	332.2
working capital	1,32,003.00	4,84,258.00	4,56,754.00	4,94,140.07	6,60,968.96	192809.4	4,45,624.81	400.7
Inventory	11,719.00	16,552.00	17,163.00	35,364.36	42,420.39	13411.07	24,643.75	262.0

Rs in thousands

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	61.83	49.68	33.22	14.24	16.79
Return on capital employed (PAT\cap employed)	14.93	15.69	18.36	5.96	7.93
Return on net Asset (EBIT/NA)	0.22	0.24	0.28	0.09	0.14
Financial leverage (PAT/EBIT)	67.56	64.87	66.57	62.90	66.84
Profit margin(EBIT/Revenue from operations)	13.55	6.72	7.23	3.42	5.39
Asset turnover (sales/Net Asset)	163.06	360.05	381.69	276.53	257.60

source-Annual reports of selected MSMEs

Revenue from operation of company has increased by approximately 324% which reflects growing trend from 2010-2011 to 2014-15.The average revenue from operation is Rs.2,51,152. Profit after tax is also increasing showing increasing trend.

Return on equity reflects a downturn from 61.83% to 16.79%.Return on capital employed is 7.93% in the year 2014-15.

3) DRA Consultants Private Limited

Company was incorporated as "DRA Consultants Private Limited" at Nagpur, Maharashtra as a private limited company under the provisions of the Companies Act, 1956 vide Certificate of Incorporation dated May 05, 2009 by Registrar of Companies, Maharashtra, Mumbai.

Financial summary of DRA Consultants Private Limited

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
					Rs in thousands			
Revenue from operations	78,860.00	1,21,105.00	99,396.00	99,384.00	1,63,108.00	32056.69	1,12,370.60	106.83
Total Expenditure	62,540.00	95,701.00	79,361.00	82,429.00	1,33,829.00	26809.81	90,772.00	113.99
Profit After Tax	11,120.00	17,128.00	13,540.00	12,217.00	21,047.00	4062.793	15,010.40	89.27
Total Current assets	1,52,520.00	2,33,934.00	1,92,297.00	1,94,030.00	3,17,984.00	62796.12	2,18,153.00	108.49
working capital	20,221.00	40,173.00	50,653.00	55,221.00	35,971.00	13707.97	40,447.80	77.89

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	32.84	33.59	20.98	16.06	21.67
Return on capital employed (PAT\cap employed)	24.46	16.42	13.05	11.09	15.68
Return on net Asset (EBIT/NA)	33.40	24.38	19.71	17.78	25.84
Financial leverage (PAT/EBIT)	66.32	66.35	65.84	62.36	60.67
Profit margin(EBIT/Revenue from operations)	21.26	21.32	20.69	19.71	21.27
Asset turnover (sales/Net Asset)	157.11	114.37	95.26	90.20	121.50

source-Annual reports of selected MSMEs

4   GANGA PHARMACEUTICALS LIMITED

Company was originally incorporated on 11th September, 1989, as "Ganga Pharmaceuticals Private Limited" under the provisions of the Companies Act, 1956 with the Registrar of Companies, Maharashtra, Mumbai. The Company had created an exceptional market reputation not only in Mumbai but all over Maharashtra. Initially, the company was manufacturing the following proprietary products:

1) Ampachan Vati;

2) Khadira Vati;

3) Nirmalaya churna

As on date the company, it has 230(mention the total number of products in all the categories) number of products in its total portfolio. These products can be divided into two (2) broad categories:

I. Liquid Dosage Form
Oil-based products
II. Solid Dosage Form
A. Powder-based products;
B. Tablets; and
C. Pills

Financial summary Ganga pharmaceuticals limited

					Rs in thousands			
Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	18,600.57	19,454.03	23,099.74	26,621.11	26,947.49	3892.896	22,944.59	44.8745
Total Expenditure	18,579.98	19,396.60	23,203.22	27,649.31	28,181.12	4478.121	23,402.05	51.67466
Profit After Tax	27.41	187.73	261.57	299.49	335.02	121.8454	222.24	1122.437
Total Current assets	37,207.96	39,038.35	46,564.53	54,569.90	55,463.63	8477.451	46,568.87	49.06389
working capital	19027.08	33458.98	40890.20	44104.85	43256.78	10448.58	36,147.58	127.3432

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	0.13	0.87	1.02	1.15	1.36
Return on capital employed (PAT\cap employed)	0.29	0.69	0.79	0.84	0.91
Return on net Asset (EBIT/NA)	**0.29**	**0.69**	**0.79**	**0.84**	**0.91**
Financial leverage (PAT/EBIT)	21.16	61.94	68.88	69.10	68.42
Profit margin(EBIT/Revenue from operations)	0.70	1.56	1.64	1.63	1.82
Asset turnover (sales/Net Asset)	0.42	0.44	0.48	0.52	0.50

source-Annual reports of selected MSMEs

5) KARNAVATI FINANCE LIMITED

Company was incorporated as Karnavati Finance and leasing limited at Mumbai on December 05, 1984 under the Companies Act, 1956 with the Registrar of Companies, Maharashtra. The Company is a NBFC registered with RBI to carry on NBFC Activities under Section 45IA of the Reserve Bank of India Act, 1934 bearing Certificate no. 13.00064 dated February 24, 1998.

Financial summary of Karnavati finance limited-

					Rs in thousands			
Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	1,320.00	2,419.00	1,504.00	3,742.79	4,758.35	1476.9963	2,748.83	260.4811
Total Expenditure	1,382.00	2,386.00	9,329.00	2,830.12	8,238.29	3664.6539	4,833.00	496.1136
Profit After Tax	8.00	17.00	-7,887.00	447.32	-3,752.06	3589.7059	-2,233.35	-47000.75
Total Current assets	2,710.00	4,822.00	2,946.00	7,020.23	9,244.58	2783.2091	5,348.56	241.1284
working capital	2,429.00	3,045.00	1,558.00	4,639.15	6,342.81	1900.7782	3,602.79	161.1284

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	0.04	0.04	-25.81	1.44	-5.13
Return on capital employed (PAT\cap employed)	0.04	0.04	-24.30	1.32	-4.77
Return on net Asset (EBIT/NA)	0.28	0.09	-24.04	2.70	-4.42
Financial leverage (PAT/EBIT)	13.33	44.74	100.79	49.01	107.82
Profit margin(EBIT/Revenue from operations)	4.55	1.57	-520.28	24.38	-73.13
Asset turnover (sales/Net Asset)	6.20	5.93	4.62	11.08	6.05

source-Annual reports of selected MSMEs

6) MAHABIR METALLEX LIMITED

Company was incorporated as "Apollo Fittings Private Limited" under the provisions of the

Companies Act, 1956 vide certificate of incorporation dated January 10, 2003 bearing

registration no. 119413, in Nagpur.

Product Portfolio:

The detailed product portfolio is:
TMT Bars,Rolled Products,Billets,Colour Coated Sheets,Steel Strips/ Cold Rolled Strips
Round Angle Channels & Bars,Ingots,Steel Pipes and Tubes.

Financial summary of Mahabir metallex limited

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	0.00	0.00	0.00	300.00	95,036.17	42468.12	19,067.23	100
Total Expenditure	30.00	27.00	21.00	139.00	95,702.57	42775.26	19,183.91	318908.6
Profit After Tax	-30.00	-27.00	-21.00	110.00	668.60	301.259	140.12	-2328.667
Total Current assets	0.00	0.00	0.00	549.00	1,91,407.34	85538.91	38,391.27	100
working capital	-104.00	-115.00	-126.00	-444.00	1,60,401.22	71821.96	31,922.44	-154331.9

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	-0.07	-0.06	-0.05	0.16	0.55
Return on capital employed (PAT\cap employed)	-0.07	-0.06	-0.05	0.15	0.43
Return on net Asset (EBIT/NA)	-0.07	-0.06	-0.05	0.22	0.61
Financial leverage (PAT/EBIT)	100.00	100.00	100.00	68.32	71.37
Profit margin(EBIT/Revenue from operations)	NA	NA	NA	53.67	0.99
Asset turnover (sales/Net Asset)	0.00	0.00	0.00	0.41	61.66

source-Annual reports of selected MSMEs

7) SPS Finquest Limited- Company was originally incorporated in Mumbai as "Ceenik

Holding Pvt. Ltd."on March 12, 1996 under the provisions of the Companies Act, 1956.

Company was further changed to SPS Finquest Pvt. Ltd.

Product-Company operates as a Non Deposit taking Non-Banking Finance Company (NBFC-

ND) engaged primarily in the business of advancing loans for investing/trading in securities.

Financial summary of SPS Finquest Limited

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	19,650.38	76,990.83	84,838.83	75,761.50	47,875.34	27036.75	61,023.38	47775.34
Total Expenditure	19,098.61	59,906.07	74,353.32	65,836.48	45,286.07	21663.27	52,896.11	45186.07
Profit After Tax	2,234.10	10,665.27	3,605.34	6,936.84	-797.55	4414.276	4,528.80	-897.55
Total Current assets	43,796.70	1,63,404.23	1,67,182.82	1,58,646.36	99,089.07	53948.05	1,26,423.84	98989.07
working capital	24,684.28	1,16,950.50	1,61,240.95	1,54,326.60	69,935.44	57918.47	1,05,427.55	69835.44

Ratio

Ratio					
Return on Equity(PAT/net worth)		28.51	57.65	16.31	23.90	-0.29
Return on capital employed (PAT\cap employed)		0.51	1.93	0.59	1.35	-0.26
Return on net Asset (EBIT/NA)		0.65	2.87	0.71	1.97	2.18
Financial leverage (PAT/EBIT)		79.40	67.32	82.21	68.60	-11.86
Profit margin(EBIT/Revenue from operations)		14.32	20.58	5.17	13.35	14.05
Asset turnover (sales/Net Asset)		4.51	13.96	13.77	14.77	15.53

source-Annual reports of selected MSMEs

8) VALIANT ORGANICS LIMITED

Company was incorporated as Valiant Organics Private Limited on February 16, 2005 under the Companies Act, 1956 and having its Registered Office in Mumbai, Maharashtra.

Valiant Organics Ltd. is a chemical manufacturing company with focus on manufacturing and marketing of different types of chlorophenol which is a chemical which has several applications mainly into agro-chemical industry, pharmaceutical industry, dyes industry, manufacturing of cosmetics and veterinary drugs.

Financial summary of Valiant organics limited

Rs in thousands

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	3,26,767.00	3,39,945.00	4,25,098.00	5,90,379.00	5,20,994.00	114265.7	4,40,636.60	59.4
Total Expenditure	2,72,475.00	2,91,649.00	3,57,117.00	4,93,034.00	3,77,240.00	87065.58	3,58,303.00	38.4
Profit After Tax	39,178.00	40,258.00	55,413.00	72,729.00	1,03,064.00	26637.51	62,128.40	163.1
Total Current assets	6,38,420.00	6,71,852.00	8,37,628.00	11,56,142.00	10,01,298.00	219463.8	8,61,068.00	56.8
working capital	5,89,415.00	5,96,162.00	7,27,913.00	10,68,837.00	9,53,667.00	215731.3	7,87,198.80	61.8

Ratio

Ratio					
Return on Equity(PAT/net worth)		25.36	27.04	29.73	33.98	45.30
Return on capital employed (PAT\cap employed)		14.91	10.24	14.80	18.34	25.28
Return on net Asset (EBIT/NA)		23.95	23.29	23.47	29.13	39.82
Financial leverage (PAT/EBIT)		62.24	62.59	63.07	62.95	63.47
Profit margin(EBIT/Revenue from operations)		19.26	18.92	20.67	19.57	31.17
Asset turnover (sales/Net Asset)		124.35	123.09	113.58	148.86	127.77

source-Annual reports of selected MSMEs

9) AGRIMONY COMMODITIES LIMITED

The company is currently engaged in the business of trading of iron & steel products, suitings & shirtings and other dress materials and agriculture products. The company is a multi-product trading company with a diverse product portfolio. The company currently trade into following category of products:

Iron & Steel Products & Textile Products

Company is also offering the commodity broking services through their subsidiary company Advantage Commodities Private Limited (ACPL). ACPL is engaged in the business of commodities broking through its membership of MCX.

Financial summary of Agrimony commodities limited

					Rs in thousands			
Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	1,709.00	0.00	231.00	4,17,498.75	4,20,083.15	229029.8	1,67,904.38	24480.6409
Total Expenditure	411.00	795.00	848.00	4,17,304.00	4,24,803.24	230260.9	1,68,832.25	103258.453
Profit After Tax	119.00	65.00	197.00	645.95	745.83	317.0788	354.56	526.747059
Total Current assets	2,239.00	860.00	1,276.00	8,35,448.70	8,45,632.22	459598.6	3,37,091.18	37668.2994
working capital	2,174.00	746.00	1,098.00	6,46,200.09	5,12,696.68	320142.5	2,32,582.95	23483.1037

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	0.69	0.38	1.13	0.49	0.57
Return on capital employed (PAT\cap employed)	0.69	0.37	1.12	0.20	0.16
Return on net Asset (EBIT/NA)	0.98	0.55	1.93	0.33	0.23
Financial leverage (PAT/EBIT)	70.00	67.71	57.94	60.29	68.61
Profit margin(EBIT/Revenue from operations)	9.95	NA	147.19	0.26	0.26
Asset turnover (sales/Net Asset)	9.90	0.00	1.31	130.31	90.40

source-Annual reports of selected MSMEs

10) SUYOG TELEMATICS LIMITED

Suyog Telematics Limited is an India-based telecommunication infrastructure provider. The Company provides telecommunication products and services and is engaged in the other

machinery and equipment renting business. The Company is engaged primarily in the business of installing and commissioning of poles, towers and optical fiber cable (OFC) systems in India. The Company's services include fiber optic network solution, tower erection service, pole erection service and trading service.

Financial summary of Suyog telematics limited

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	55,000.00	89,500.00	88,879.03	1,17,156.92	2,17,121.06	61957.92	1,13,531.40	294.8
Total Expenditure	46,500.00	79,300.00	74,554.64	1,01,573.76	1,63,303.82	43892.76	93,046.44	251.2
Profit After Tax	6,400.00	7,200.00	14,324.39	15,583.16	53,817.24	19638.58	19,464.96	740.9
Total Current assets	1,07,900.00	1,76,000.00	1,77,758.06	2,34,313.84	4,34,242.12	124708.4	2,26,042.80	302.4
working capital	31,800.00	1,22,500.00	39,954.08	1,12,946.95	3,16,489.48	114824.3	1,24,738.10	895.2

Rs in thousands

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	18.44	17.18	25.18	14.68	23.42
Return on capital employed (PAT\cap employed)	5.78	7.21	7.36	5.86	12.50
Return on net Asset (EBIT/NA)	9.22	11.70	14.91	11.16	16.45
Financial leverage (PAT/EBIT)	62.75	61.54	49.39	52.51	76.02
Profit margin(EBIT/Revenue from operations)	18.55	13.07	32.63	25.33	32.61
Asset turnover (sales/Net Asset)	49.73	89.50	45.68	44.05	50.44

source-Annual reports of selected MSMEs

11 COMFORT COMMOTRADE PRIVATE LIMITED

Company was originally incorporated in Mumbai as "Comfort Commotrade Private Limited" on 5th November, 2007 under the Companies Act, 1956 vide certificate of incorporation issued by the Registrar of Companies, Maharashtra, Mumbai.

Company, currently engaged in the business of commodity broking. It offers trading in many commodities such as bullion (gold, silver), energy (crude oil, natural gas), metals, food grains (rice, maize), spices, oil and oil seeds and others.

Financial summary of Comfort commotrade private limited

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
					Rs in thousands			
Revenue from operations	2,200.00	5,501.00	4,451.00	2,281.00	2,268.00	1539.03	3,340.20	3.09
Total Expenditure	1,700.00	3,445.00	7,186.00	4,422.00	6,172.00	2175.61	4,585.00	263.06
EBIT	600.00	3,048.00	2,225.93	6,286.89	10,800.61	4041.59	4,592.28	1700.10
Profit After Tax	400.00	2,026.00	1,108.00	4,706.00	8,173.00	3184.31	3,282.60	1943.25
Total Current assets	4,900.00	14,020.00	14,970.93	17,695.89	27,413.61	8079.85	15,800.08	459.46
working capital	2,000.00	6,535.00	8,347.93	10,562.89	15,764.61	5076.01	8,642.08	688.23

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	4.82	4.55	1.05	4.36	7.19
Return on capital employed (PAT\cap employed)	3.57	3.89	0.99	4.08	6.51
Return on net Asset (EBIT/NA)	5.41	5.86	1.98	5.45	8.60
Financial leverage (PAT/EBIT)	66.67	66.47	49.78	74.85	75.67
Profit margin(EBIT/Revenue from operations)	27.27	55.41	50.01	275.62	476.22
Asset turnover (sales/Net Asset)	19.82	10.57	3.96	1.98	1.81

source-Annual reports of selected MSMEs

7)   JUPITER INFOMEDIA LIMITED

This is growth oriented web Infomedia Company with online publications on Business,

Encyclopedia and Yellowpages. Company develops various informative online publications /

verticals in house. The company aims to develop an online information library that would

provide in-depth information to its visitors on various topics. At present, we have three online

publications where a substantial progress has been done. These include an online business

directory (B2B Portal operating through the website - www.JimTrade.com), an Encyclopedia on

India (operating through the website - www.IndiaNetzone.com) and an online yellow pages.

Financial summary

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
					Rs in thousands			
Revenue from operations	7,855.00	6,394.00	6,110.00	5,471.00	4,050.00	1386.346	5,976.00	-48.44048
Total Expenditure	7,245.00	6,153.00	7,317.00	6,293.00	5,655.00	723.6165	6,532.60	-21.94617
Profit After Tax	495.00	201.00	922.00	617.00	1,264.00	407.828	699.80	155.3535
Total Current assets	15,595.00	12,748.00	14,349.00	12,381.00	10,969.00	1796.406	13,208.40	-29.66335
working capital	1,864.00	2,154.00	1,331.00	5,870.00	3,850.00	1854.065	3,013.80	106.5451

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	8.32	0.90	1.47	0.91	1.14
Return on capital employed (PAT\cap employed)	8.30	0.90	1.47	0.91	1.14
Return on net Asset (EBIT/NA)	12.63	1.33	1.45	1.16	1.60
Financial leverage (PAT/EBIT)	**65.82**	**67.91**	**101.10**	**78.50**	**70.89**
Profit margin(EBIT/Revenue from operations)	9.57	4.63	14.93	14.37	44.02
Asset turnover (sales/Net Asset)	131.97	28.67	9.73	8.10	3.64

Source-Annual reports of selected MSMEs

8) VIDLI RESTAURANTS LIMITED

Incorporated in 2007, our company Vidli restaurants Limited is engaged in the hospitality

business and runs chain of restaurants either through own operated outlets or through franchisee

operated outlets.

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
					Rs in thousands			
Revenue from operations	**0.00**	**0.00**	**0.00**	**4,640.00**	**24,456.00**	10610.26	5,819.20	100
Total Expenditure	15.00	5.00	4.00	4,139.00	24,647.00	10707.51	5,762.00	164213.3
Profit After Tax	**-12.00**	**-6.00**	**-5.00**	**442.00**	**689.00**	325.867	221.60	-5841.667
Total Current assets	**3.00**	**-1.00**	**-1.00**	**9,221.00**	**49,792.00**	21608.68	11,802.80	1659633
working capital	-4.00	-8.00	-8.00	5,374.00	44,377.00	19387.91	9,946.20	-1109525

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
			(In percentage)		
Return on Equity(PAT/net worth)	-22.22	-12.50	-11.36	94.44	2.23
Return on capital employed (PAT\cap employed)	-10.81	-5.71	-5.43	3.37	1.23
Return on net Asset (EBIT/NA)	-13.51	-4.76	-4.40	5.35	2.27
Financial leverage (PAT/EBIT)	80.00	120.00	125.00	62.96	54.04
Profit margin(EBIT/Revenue from operations)	NA	NA	NA	15.13	5.21
Asset turnover (sales/Net Asset)	0.00	0.00	0.00	35.35	43.57

Source-Annual reports of selected MSMEs

9) CAWASJI BEHRAMJI CATERING SERVICES
Company was incorporated on April 03, 2009 by Promoters Mr. Alfred Micheal Arambhan and Mrs.

Nalini Maria Arambhan with the objective to establish a well-known name in catering & housekeeping

services. They are an ISO 9001-2008+ HACCP and ISO 22000:2005 certified Company currently engaged

in the business of providing food catering & housekeeping services, both in India and abroad. In context

of their services offering in abroad / overseas clients, they provide catering & housekeeping services on

vessels travelling to high seas. Besides this, the Company has also forayed into restaurant business wherein we provide multi-cuisine food to consumer through our restaurant.

Financial Summary

					Rs in thousands			
Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	92.69	112.85	46.51	5,978.91	19,290.11	8330.878	5,104.21	20712.54
Total Expenditure	103.39	116.94	101.08	5,781.09	20,187.33	8699.9	5,257.97	19426.37
Profit After Tax	-7.39	-5.63	8.45	172.51	65.49	76.33511	46.68	-986.171
Total Current assets	188.68	224.16	156.04	11,932.51	39,542.93	17061.77	10,408.86	20857.67
working capital	108.21	223.06	-4,214.51	879.94	31,144.76	14406.65	5,628.29	28681.78

Ratio								(In percentage
Return on Equity(PAT/net worth)			-7.98	-6.47	8.85	25.83	0.09	
Return on capital employed (PAT\cap employed)			-4.27	-6.39	0.19	1.47	0.08	
Return on net Asset (EBIT/NA)			-6.18	-4.64	0.49	2.11	0.96	
Financial leverage (PAT/EBIT)			69.07	137.81	38.71	69.61	8.59	
Profit margin(EBIT/Revenue from operations)			-11.54	-3.62	46.92	4.14	3.95	
Asset turnover (sales/Net Asset)			53.55	128.12	1.04	51.01	24.29	

Source-Annual reports of selected MSMEs

10) DIGGI SECURITIES PRIVATE LIMITED

Company was incorporated as ―Diggi Securities Private Limited under the provisions of the Companies Act, 1956 on December 1, 2010, issued by Registrar of Companies, Maharashtra.

Company's business activities may be classified as follows:

1. Trading in real estate by way of acquiring interests in various real estate projects such as flats, land and dealing in construction material

2. Trading in fabrics.
Financial summary

					Rs in thousands			
Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	3,74,922.58	4,21,567.34	6,23,957.13	7,26,840.68	6,30,719.38	150206.6	5,55,601.42	68.23
Total Expenditure	3,55,286.21	3,84,715.04	5,86,995.59	6,91,163.95	6,24,853.00	149868.5	5,28,602.76	75.87
Profit After Tax	11,109.56	21,156.02	26473.73	22,156.97	8,221.14	7778.069	17,823.48	-26.00
Total Current assets	7,41,318.35	8,27,438.40	12,37,426.45	14,40,161.60	12,63,793.52	301805.4	11,02,027.66	70.48
working capital	6,22,247.58	6,63,820.04	9,90,666.06	11,03,998.23	8,73,091.24	206982.2	8,50,764.63	40.31

					(In percentage)
Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	35.80	40.54	33.91	22.43	7.79
Return on capital employed (PAT\cap employed)	7.22	9.75	8.06	5.03	1.61
Return on net Asset (EBIT/NA)	13.87	18.31	14.26	12.61	7.53
Financial leverage (PAT/EBIT)	52.07	53.28	56.52	39.86	21.42
Profit margin(EBIT/Revenue from operations)	5.69	9.42	7.51	7.65	6.09
Asset turnover (sales/Net Asset)	243.77	194.33	189.94	164.87	123.68

Source-Annual reports of selected MSMEs

11) Global space technologies ltd

The company was incorporated as a private limited company under the Companies Act, 1956 in the name of Global Space Tech Private Limited at Mumbai vide Certificate of Incorporation dated December 22, 2010 bearing Corporate Identification Number (CIN) U64201MH2010PTC211219.Company is an Information and Communication Technology (ICT) company providing integrated software product platforms and solutions to enable large and medium enterprises embrace mobility & digital technology for their business enhancement. Company provides domain specific mobility & digital technology products by leveraging contemporary web, mobile technology, big data, analytics & custom hardware to deliver customizable and configurable solutions to different industry verticals. Company launched its flagship product for pharmaceutical industry in the year 2011.

Financial summary

					Rs in thousands			
Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	8,178.00	40,656.00	61,566.00	1,07,977.00	1,39,822.00	52578.71	71,639.80	1609.733
Total Expenditure	5,491.00	36,107.00	56,345.00	99,242.00	1,28,133.00	49013.53	65,063.60	2233.509
Profit After Tax	2,189.00	2,999.00	4,973.00	8,483.00	6,243.00	2528.845	4,977.40	185.1987
Total Current assets	34,210.00	49,815.00	55,815.00	72,394.00	1,45,231.00	43427.7	71,493.00	324.5279
working capital	21,652.00	15,373.00	13,528.00	13,862.00	54,963.00	17684.81	23,875.60	153.8472

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	931.5	49.8	13.2	18.4	8.9
Return on capital employed (PAT\cap employed)	6.0	4.8	6.1	8.0	3.8
Return on net Asset (EBIT/NA)	7.8	7.9	8.8	11.7	10.0
Financial leverage (PAT/EBIT)	76.1	60.6	69.3	67.9	37.9
Profit margin(EBIT/Revenue from operations)	35.2	12.2	11.7	11.6	11.8
Asset turnover (sales/Net Asset)	22.2	65.0	75.5	101.5	85.2

Source-Annual reports of selected MSMEs

12) Mitcon consultancy & engineering services limited

Company was originally incorporated as Maharashtra Industrial and Technical Consultancy Organisation Limited pursuant to a Certificate of Incorporation dated April 16, 1982 issued by the Registrar of Companies, Bombay, Maharashtra. Company provide Consultancy and Engineering Services to various sectors through our following business divisions:

- Power Plant Consultancy and Engineering Services: technical, financial, engineering and project management consultancy services from concept to commissioning, to decentralized, stand alone power/ co-generation power projects, based on renewable and fossil fuels.

- Energy and Carbon Services: Services to improve energy efficiency and conservation, consultancy in setting up renewable energy and carbon mitigation projects.

- Environment Management and Engineering Services: Services such as EIA study, environmental clearances, environmental audits and environmental monitoring.

- Infrastructure Consulting Group: Project management services from concept to commissioning stage (except contracting) for industrial, institutional, commercial and residential projects.

- Banking and Finance: Project Reports (DPR) and conduct Appraisal /Techno Economic Viability (TEV) studies, technical/ financial and corporate debt restructuring, loan syndication, lender's

engineer services, assets and business valuation etc. We also provide services of conducting

market research, comprising industrial, consumer and social research.

Financial summary

					Rs in thousands			
Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
Revenue from operations	5,43,778.37	4,66,657.35	4,04,906.74	4,32,387.65	4,49,738.15	52356.63	4,59,493.65	-17.29
Total Expenditure	4,11,862.50	3,47,385.65	3,25,197.33	3,96,244.27	4,18,106.07	41224.71	3,79,759.16	1.52
Profit After Tax	1,08,806.60	99,178.59	70,890.23	53,547.05	46,097.51	27556.69	75,704.00	-57.63
Total Current assets	10,64,447.47	9,13,221.59	8,00,994.30	8,82,178.97	9,13,941.73	95411.4	9,14,956.81	-14.14
working capital	9,74,801.48	8,41,720.42	7,19,833.08	8,10,065.17	8,33,673.59	91475.89	8,36,018.75	-14.48

Ratio					(In percentage)
Return on Equity(PAT/net worth)		23.38	17.71	8.53	6.23	5.16
Return on capital employed (PAT\cap employed)		18.53	15.13	7.51	5.61	4.62
Return on net Asset (EBIT/NA)		26.70	21.38	10.66	8.20	6.81
Financial leverage (PAT/EBIT)		69.38	70.74	68.46	68.34	67.87
Profit margin(EBIT/Revenue from operations)		28.84	30.04	25.57	18.12	15.10
Asset turnover (sales/Net Asset)		92.59	71.18	41.67	45.26	45.09

Source-Annual reports of selected MSMEs

13) Creative Peripherals and Distribution Limited

Company was originally incorporated as "Creative Pheripherals and Distributions Private Limited" at

Mumbai, Maharashtra, as a private limited company under the provisions ofthe Companies Act, 1956

vide Certificate of Incorporation dated September 22, 2004 bearing Corporate Identification Number

U52392MH2004PTC148754.

Company is engaged in providing distribution services of both volume business and value business

products. Products which fall in the volume business segment are typically fast moving high volume

products of leading brands in respective product category such as AOC/Samsung monitors etc. Since the

product / brands are well established, the distributors mainly play a connecting role while the primary

responsibility for demand generation lies with the vendor.

Financial summary

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
					Rs in thousands			
Revenue from operations	12,40,822.00	12,65,269.00	13,96,795.00	18,44,781.00	19,86,230.00	345425.5	15,46,779.40	60.07373
Total Expenditure	12,33,867.00	12,52,550.00	13,79,479.00	18,35,056.00	19,75,616.00	345984.6	15,35,313.60	60.1158
Profit After Tax	5,334.00	9,036.00	15,852.00	7,649.00	6,699.00	4107.115	8,914.00	25.59055
Total Current assets	2,39,000.00	2,97,881.00	3,57,480.00	3,75,023.00	3,43,709.00	54795.9	3,22,618.60	43.8113
working capital	75,448.00	79,459.00	92,984.00	1,06,493.00	1,17,734.00	17854.48	94,423.60	56.04655

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	9.04	13.28	18.93	8.44	6.55
Return on capital employed (PAT\cap employed)	2.08	2.83	4.19	1.93	1.84
Return on net Asset (EBIT/NA)	7.68	9.88	11.11	8.38	12.60
Financial leverage (PAT/EBIT)	27.05	28.68	37.74	23.05	14.62
Profit margin(EBIT/Revenue from operations)	1.59	2.49	3.01	1.80	2.31
Asset turnover (sales/Net Asset)	483.38	396.95	369.41	466.11	545.98

Source-Annual reports of selected MSMEs

14) Ashapura intimates ltd

Company procures non-branded intimate garments i.e. our products from vendors including

MAPL.MAPL and other vendors manufacture our products based on designs and specifications provided

by Company. Ashapura Intimates Fashion Ltd (AIFL), incorporated in 2006 is a fashion house that

designs, brands, markets and retails intimate garments for men, women and children. The company is in

the business of designing, branding, marketing and retailing clothing products such as lounge wear,

sleep wear, bridal night wear, honeymoon sets bathrobes, women inner wear, sportswear and kids

lounge wear since its under the brand name 'Valentine'.

Financial summary

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
					Rs in thousands			
Revenue from operations	5,05,138.00	10,146.74	13,06,238.00	16,56,958.00	17,744.22	752102.4	6,99,244.99	-96.4873
Total Expenditure	4,86,278.00	9,658.88	12,39,583.00	15,90,078.00	16,339.17	719032.7	6,68,387.41	-96.64
Profit After Tax	13,974.00	341.42	47,308.00	54,075.00	867.03	25694.32	23,313.09	-93.7954
Total Current assets	10,05,390.00	20,147.04	25,93,129.00	33,01,111.00	34,950.42	1496700	13,90,945.49	-96.5237
working capital	2,39,758.00	4,30,605.00	12,87,785.00	7,77,424.00	9,73,293.00	418881.3	7,41,773.00	305.9481

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	19.13	0.31	26.03	12.61	0.18
Return on capital employed (PAT\cap employed)	4.17	0.06	2.96	4.11	0.05
Return on net Asset (EBIT/NA)	17.55	10.91	10.20	12.33	0.10
Financial leverage (PAT/EBIT)	23.04	0.54	29.01	33.30	54.89
Profit margin(EBIT/Revenue from operations)	12.01	622.51	12.48	9.80	8.90
Asset turnover (sales/Net Asset)	146.11	1.75	81.69	125.79	1.13

Source-Annual reports of selected MSMEs

15) PATDIAM JEWELLERY LIMITED

Company was incorporated in 1999, Patdiam jewellery limited is engaged in the business of designing, manufacturing and marketing of various jewelleries made out of gold, platinum with studded diamond, precious and semi precious stones. They are 100% export oriented unit primarily catering to international markets. They also have a partnership firm M/s Zest Corporation engaged in manufacturing and marketing of studded jeweler products for retail customers. Their products cater to customers across high-end, mid-market and value market segments.Financial summary

Financial factors	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	STDEV	AVG	%growth
					Rs in thousands			
Revenue from operations	4,81,041.00	2,82,837.00	3,14,529.00	3,66,260.00	5,36,497.00	108742	396233	11.5
Total Expenditure	4,61,123.00	2,80,195.00	3,06,479.00	3,54,610.00	5,05,983.00	98043	381678	9.7
Profit After Tax	9,590.00	7,950.00	8,690.00	7,951.00	5,205.00	1639	7877	-45.7
Total Current assets	9,51,754.00	5,70,982.00	6,29,698.00	7,28,821.00	10,47,685.00	206086	785788	10.1
working capital	7,23,136.00	3,78,701.00	3,84,648.00	4,34,928.00	7,99,648.00	201283	544212	10.6

Ratio	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Return on Equity(PAT/net worth)	4.29	3.43	3.62	3.20	2.06
Return on capital employed (PAT\cap employed)	2.11	1.87	1.78	1.46	1.03
Return on net Asset (EBIT/NA)	6.66	5.90	5.88	5.51	6.65
Financial leverage (PAT/EBIT)	31.69	31.63	30.33	26.54	15.53
Profit margin(EBIT/Revenue from operations)	6.29	8.89	9.11	8.18	6.25
Asset turnover (sales/Net Asset)	105.90	66.40	64.53	67.32	106.42

Source-Annual reports of selected MSMEs

6.3   DATA COLLECTION:-

The approach adopted is basically analytical and descriptive in nature. Data is collected from secondary sources i.e. District Industrial Centre of Maharashtra from published sources Books, journals, annual reports of the company, auditor's report and published records of Companies, MSMEs annual reports, RBI Bulletin, SME-Bombay stock exchange ,NSE–Emerge, compliance to corporate governance etc.Thus in depth data collection from their published financial statement, annual reports and electronics media disclosure on internet are extensively used for the present study.

6.4   DATA ANALYSIS:-

The information collected is tabulated, classified and converted into charts, maps, graphs to analyze the data. Appropriate statistical tools are used to derive the calculation. Tools of business mathematics are used to analyze the data.

Data generally collected for making comparison of companies in Maharashtra. Units of analysis and interpretation are those which facilitate comparison. Frequency tables and descriptive statistics are constructed to display results with respect to each research questions. They include rates, trend, ratio and percentage, and co-efficient. Rates are used in those cases where comparison is made between various companies. Ratios and percentages are used where population of the region, employment and growth of industry which would be helpful to interpret the problems of SME. Co-efficient is used for correlation between growth and financial factors affecting the SMEs.

6.5 AREAS OF FINANCIAL PERFORMANCE ANALYSIS

Financial performance analysis is the process of determining the operating and financial characteristics of a firm from accounting and financial statements (Bhunia &Sarker,2011). Financial analysts often assess firms

  i. production and productivity performance
  ii. profitability performance
  iii. liquidity performance
  iv. working capital performance,
  v. fixed assets performance,
  vi. fund flow performance

However in the present study financial health of Small and Medium Enterprises is measured from the following perspectives:
1. Working capital Analysis
2. Leverage Analysis
3. Activity Analysis
4. Profitability Analysis

Conceptual Framework

Independent Variable	Dependent Variable
Liquidity	Return on Assets
Leverage Analysis	Return on capital employed
Activity Analysis	
Profitability Analysis	

Independent Variable	Measurement	Dependent Variable	Measurement
Liquidity	Liquidity Ratios	Financial performance	ROA ROE EPS Profit margin

Ownership Structure	Debt/Equity	Financial performance	ROA ROE EPS Profit margin
Company Size	Total Assets	Financial performance	ROA ROE EPS Profit margin
Sales growth	Sales Increment	Financial performance	ROA ROE EPS Profit margin
Leverage	Interest Coverage Ratio Debt-to-Worth Ratio-Total Liabilities / Net Worth	Financial performance	ROA ROE EPS Profit margin

7 ORGANIZATION OF STUDY

The flow of chapters of study

Chapter1:	• Introduction of study
Chapter II	• Literature review
Chapter III	• Profile of Maharashtra state
Chapter IV	• Conceptual framework of Financial Performance
Chapter \	• Profile of selected Small and medium enterprises
chapter VI	• Analysis of financial factors of Small and medium enterprises
chapter VII	• Conclusion and suggestion
chapterVIII	• Bibliography
chapter IX	• Annexures
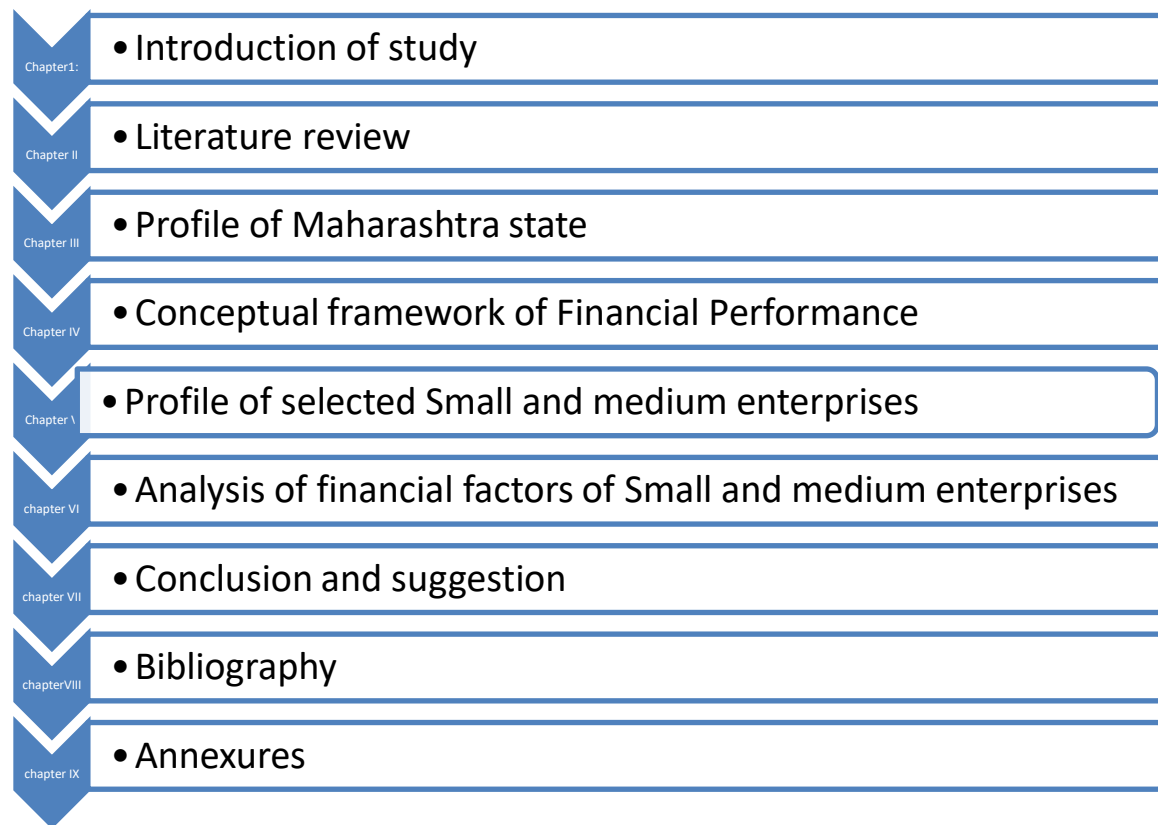
Organization of Study

The study has been divided in six chapters
Chapter1:
Introduction- First Chapter deals with a brief introduction of the MSMEs and its economic significance in the Indian context. This chapter also includes a brief explanation about the objectives of the study, review of existing literature on the subject, methodology, need for the study followed by scope and limitations of the study.

Chapter II: Literature Review
Discuss the past studies in the field of performance of Small and medium enterprises. A literature review is designed to identify related research, to set the current research within a conceptual and theoretical context. It contains in-depth study of prior research on the subject.

Chapter III:
Profile of Maharashtra state -This chapter deals profile of Maharashtra viz demography, large Industries and small and medium enterprises of Maharashtra.
Chapter IV:
This chapter emphasis on explanation of the financial performance, which includes three broad concepts, viz.
(1) Financial strength and capital structure - covering capital structure, theory of capital structure, its determinants, leverages and cost of capital;
(2) Working capital management - this includes working capital policy, profit criterion of working capital, operating cycle analysis, cash management, receivables management, inventory management and determination of working capital finance mix; and
(3) Financial appraisal tools - this covers financial statements analysis and Du-pont analysis
(4)Financial strength model i.e Springate model which analyses the financial creditability of company

Chapter V:
Profile of Selected Small and medium enterprises- This chapter discusses the growth and development of selected Small and medium enterprises other than financial aspect.

Chapter VI:
Analysis of financial factors of Small and medium enterprises -. This chapter deals with the analysis of Financial Performance of Selected SMEs Certain financial tools and statistical tools are used in interpretation of the financial results of selected MSMEs.

Chapter VII:
Conclusion and suggestion
This chapter covers the summary of earlier chapters in the form of conclusion and offers
The suggestion in improving the financial performance of state owned enterprises and recommends the areas for further research.

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