Chapter IV

Components of Capital Structure

#### **CHAPTER IV**

## COMPONENTS OF CAPITAL STRUCTURE

#### 4.1 INTRODUCTION

The capital structure is a mixture of debt and equity share capital. For raising long-term finance, a company can issue three types of securities namely equity shares, preference shares and debentures. A decision about the proportion among these three types of securities refers to the capital structure of a company. Capital structure aims at the profit maximization or wealth maximization ensuring minimum cost of capital and maximum rate of return to the equity shareholders. Therefore the task of determining the prudent mix of debt and equity is essential in order to maximise the wealth of shareholders and increasing the value of the firm. This can be done simply when all those factors that are relevant to the company's capital structure decisions are properly analysed and balanced. Analysing the components of capital structure helps to determine whether a company relies more on internal finance or external finance. It will help the companies to raise their funds in future and it also reduce the financial risk of a company. Hence this chapter analyse the components of capital structure of select service industries in India. The components are ESC, PSC, retained earnings and debentures. To analyse this objective descriptive statistics such as mean, standard deviation, coefficient of variation and ANOVA tools has been used.

# 4.2 ANALYSING THE COMPONENTS OF CAPITAL STRUCTURE OF SERVICE SECTOR

For analysing the components of capital structure, companies are selected from four industries namely healthcare, hotels, software and transport industries. Selected companies have been diversified into 3 categories based on 15 years mean value of market capitalisation viz., large cap, mid cap, small cap. The companies with mean market capitalisation above 1000 crore have been classified as large cap companies and between 200 crore to 1000 crore have been classified as mid cap companies. Remaining companies with below 200 crore have been classified as small cap companies. Based on the above category, 15 companies have been selected in each service industry. All the companies taken for the study has the component of capital structure with retained earnings. This is due to the existence of companies of more than 30 years.

#### **4.2.1** Healthcare Industry

## 4.2.1.a Year Wise Analysis

## Components of Capital Structure - Healthcare Industry under Large Cap

Table 4.1 reveals the year wise analysis of components of large cap companies in healthcare industry for the period 2002-03 to 2016-17. Mean value of Equity share capital has been found to be highest in the year 2016-17 with ₹1619.8 million and the lowest mean value is found in the year 2002-03 with ₹365.2 million. The mean value of ESC shows an increasing trend throughout the study period. High level of consistency is found in the year 2003-04 with 72.00 and low level of consistency is found in the year 2016-17 at 123.75.

The Mean value of PSC has been found to be highest in the year 2006-07 and the mean remained constant at  $\stackrel{?}{\stackrel{?}{?}}$  8.66 million during the period from 2009-10 to 2012-13. In succeeding years there is no PSC has been issued. The average PSC in the years from 2003-04 to 2006-07 are greater than the overall mean. The highest co-variance has been found to be same in the year 2003-05 and 2007-08 at 223.71 which implies the low level consistency of PSC. The lowest co-variance has been found in the year 2006-07 at 140.04 showing the high level of consistency of PSC.

The mean value of retained earnings ranges between ₹ 26810.44 million and ₹ -962.56 million. The highest mean value has found in the year 2010-11 and lowest value has found in the year 2013-14. The average of retained earnings shows fluctuating trend throughout the study period. The highest co-efficient of variation is found in the year 2010-11 with 208.24. It indicates the volatility of retained earnings. The lowest co-variance of retained earnings is found in the year 2012-13 showing the stability of retained earnings.

The mean value of debentures has been found highest in the year 2015-16 with ₹36802.58 million and the lowest mean value has found in the year 2002-03 with ₹1847.42 million. The mean value of debentures shows fluctuating trend throughout the study period. The average debentures in the years from 2012-13 to 2016-17 are greater than the mean value from 2002-03 to 2011-12. High level of consistency is found in the year 2011-12 at 55.01 and low level of consistency is found in the year 2015-16 at 151.48.

Thus the components of capital structure of large cap companies in healthcare industry indicates that the ESC and debentures shows an increasing trend whereas retained earnings and PSC shows a fluctuating trend throughout the study period. It is concluded that large cap companies in healthcare industry are highly depend on the debentures for their capital structure.

Table 4.1 : Components of Capital Structure - Year Wise Analysis - Healthcare Industry (Large Cap)

year	Equi	ty Share (	Capital	Pre	ference S Capital	hare	Ret	ained Earn	ings		Debentures		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	
2002-2003	365.2	266.2	72.88	30.0	67.1	223.67	279.4	335.9	120.22	1894.6	1847.4	97.51	
2003-2004	368.4	265.3	72.00	106.7	238.7	223.71	474.6	594.1	125.19	1981.0	1913.1	96.57	
2004-2005	391.1	299.7	76.63	106.7	238.7	223.71	428.3	496.2	115.84	1910.8	1882.1	98.50	
2005-2006	591.9	645.7	109.09	109.0	237.5	217.89	434.2	635.2	146.28	2466.2	2055.9	83.36	
2006-2007	683.3	664.8	97.30	130.7	183.5	140.40	539.2	782.4	145.12	2930.0	2074.6	70.81	
2007-2008	818.9	827.1	101.00	23.2	51.9	223.71	852.5	937.8	110.01	3506.2	2814.5	80.27	
2008-2009	889.1	777.0	87.39	24.1	53.8	223.24	843.3	962.5	114.14	5130.2	3877.1	75.57	
2009-2010	1082.3	1173.1	108.39	8.7	19.4	222.99	1646.1	1764.1	107.16	6436.5	4353.2	67.63	
2010-2011	1313.5	1550.7	118.06	8.7	19.4	222.99	26810.4	55831.2	208.24	4301.1	2449.6	56.95	
2011-2012	1337.2	1536.9	114.93	8.7	19.4	222.99	1268.0	2617.9	206.47	9028.5	4966.9	55.01	
2012-2013	1357.1	1525.6	112.41	8.7	19.4	222.99	-60.0	3518.7	-5866.41	17347.6	17151.1	98.87	
2013-2014	1475.0	1778.8	120.59	0.0	0.0	0.0	-962.6	7959.4	-826.90	20200.0	22208.8	109.94	
2014-2015	1478.5	1777.0	120.19	0.0	0.0	0.0	2303.38	4363.17	189.42	17081.1	13114.1	76.78	
2015-2016	1509.4	1763.1	116.81	0.0	0.0	0.0	3335.00	5823.71	174.62	36802.6	55747.2	151.48	
2016-2017	1619.8	2004.5	123.75	0.0	0.0	0.0	2686.30	3318.55	123.54	33569.8	40461.2	120.53	
Grand Mean		1018.72		37.67			2725.21	2725.21		10972.42			

## Components of Capital Structure - Healthcare Industry under Mid Cap

Table 4.2 depicts the year wise analysis of components of mid cap companies in healthcare industry for the period from 2002-03 to 2016-17. Mean value of ESC has been found to be highest in the year 2016-17 with ₹314.82 million and the lowest mean value is found in the year 2002-03 with ₹ 234.28 million. The mean value of ESC shows an increasing trend throughout the study period. The overall average of ESC is ₹251.91 million. The average ESC from 2013-14 to 2016-17 are greater than the mean value from 2002-03 to 2012-13. The co-efficient of variation is found that the ESC has remained stable during the year 2016-17 with 118.66. Volatility is found to be high during the year 2002-03 with 163.30.

The PSC of mid cap companies in healthcare industry shows that the companies have not raised preference shares during the study period from 2002-03 to 2016-17. It indicates that the mid cap companies in healthcare industry are highly dependent on other sources such as ESC, retained earnings and debentures.

The Mean value of retained earnings has been found to be highest in the year 2016-17 with ₹271.66 million and the lowest mean value is found in the year 2003-04 with ₹14.28 million. The overall average of PSC amounts to ₹114.45 million. The average retained earnings in the years from 2012-13 to 2016-17 are greater than the mean value from 2002-03 to 2011-12. The highest co-variance has been found in the year 2003-04 at 200.09 which implies the low level of consistency and the least co-variance has been found in the year 2011-12 at 24.40 showing the high level of consistency in retained earnings.

The mean value of debentures has been found highest in the year 2011-12 with ₹762.98 million and the lowest mean value is found in the year 2003-04 with ₹160.82 million. The mean value of debentures shows fluctuating trend throughout the study period. The overall average of debenture is ₹459.48 million and the average debentures in the years from 2010-11 to 2016-17 are greater than the overall mean. The co-efficient of variation is found that the debentures has remained stable during the year 2003-04 at 19.27. Volatility is found to be high during the year 2011-12 at 114.03.

Thus the components of capital structure of mid cap companies in healthcare industry shows that ESC and retained earnings shows an increasing trend whereas debentures shows an fluctuating trend throughout the study period. There are no preference shares raised in the study period of 15 years.

Table 4.2 : Components of Capital Structure - Year Wise Analysis - Healthcare Industry (Mid Cap)

year	Equi	<b>Equity Share Capital</b>			erence Sl Capital	nare	Reta	ained Earn	ings	I	Debenture	es
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	234.3	382.6	163.30	0.0	0.0	0.0	23.8	12.8	53.74	197.7	123.1	62.29
2003-2004	235.4	381.9	162.20	0.0	0.0	0.0	14.3	28.6	200.09	160.8	31.0	19.27
2004-2005	235.6	381.8	162.03	0.0	0.0	0.0	20.0	33.3	166.58	180.5	36.6	20.25
2005-2006	235.6	381.8	162.03	0.0	0.0	0.0	26.5	22.8	85.72	198.2	171.7	86.63
2006-2007	238.6	380.2	159.30	0.0	0.0	0.0	34.6	25.2	72.83	272.2	179.7	66.01
2007-2008	238.9	380.0	159.10	0.0	0.0	0.0	45.6	32.9	72.20	320.2	224.7	70.19
2008-2009	238.6	380.2	159.33	0.0	0.0	0.0	189.0	296.0	156.63	343.2	275.8	80.38
2009-2010	248.6	374.9	150.76	0.0	0.0	0.0	99.1	36.8	37.15	371.7	416.4	112.02
2010-2011	248.8	374.8	150.60	0.0	0.0	0.0	117.2	45.2	38.58	697.3	722.6	103.63
2011-2012	248.6	374.9	150.80	0.0	0.0	0.0	111.7	27.3	24.40	763.0	870.0	114.03
2012-2013	248.6	374.9	150.80	0.0	0.0	0.0	134.9	54.0	40.02	733.4	796.4	108.60
2013-2014	270.7	367.9	135.93	0.0	0.0	0.0	176.8	99.8	56.47	701.7	682.1	97.21
2014-2015	270.7	367.9	135.90	0.0	0.0	0.0	237.9	169.7	71.36	662.0	605.0	91.38
2015-2016	270.7	367.9	135.90	0.0	0.0	0.0	213.7	129.9	60.78	657.9	592.2	90.02
2016-2017	314.8	373.6	118.66	0.0	0.0	0.0	271.7	215.1	79.17	632.6	509.0	80.46
Grand mean		251.91		0.0			114.45		459.48			

#### Components of Capital Structure -Healthcare Industry under Small Cap

Table 4.3 shows the year wise analysis of components of small cap companies in healthcare industry for the period from 2002-03 to 2016-17. Mean value of ESC has been found to be high and constant in the years from 2013-14 to 2016-17 with ₹179.88 million and the lowest mean value is found in the year 2002-03 with ₹41.36 million. The mean value of ESC shows an increasing trend throughout the study period. The overall average of ESC is ₹101.91 million. The average ESC from 2011-12 to 2016-17 are greater than the mean value from 2002-03 to 2010-11. The highest co-efficient of variation has been found constant in the years from 2014 to 2017 at 179.64 which implies that the low level of consistency and the least co-variance has been found in the year 2002-03 with 53.71 showing high level of consistency.

The PSC of small cap companies in healthcare industry shows that the companies have not raised any preference shares during the study period from 2002-03 to 2016-17. It indicates that the small cap companies in healthcare industry are highly dependent on other sources of finance.

The Mean value of retained earnings has been found to be highest in the year 2011-12 with ₹11.08 million and the lowest mean value is found in the year 2013-14. The overall average of retained earnings is ₹-23.53 million. The average retained earnings in the years from 2002-03 to 2012-13 are greater than the mean value from the year 2013-14 to 2016-17. The co-efficient of variation is found that the retained earnings has remained stable during the year 2004-05. Volatility is found to be high during the year 2008-09.

The mean value of debentures has been found highest in the year 2011-12 with ₹251.82 million and the lowest mean value is found in the year 2003-04 with 39.38 million. The mean value of debentures shows fluctuating trend throughout the study period. The overall average of debentures amounts to ₹452.71 million and the average debentures in the years from 2009-10 to 2016-17 are greater than the mean value from 2002-03 to 2008-09. High level of consistency is found in the year 2007-08 with 64.05 and low level of consistency found in the year 2003-04 with 114.82.

Thus the components of capital structure of small cap companies in healthcare industry indicates that ESC shows an increasing trend whereas retained earnings and debentures shows a fluctuating trend throughout the study period. The small cap companies has not raised the preference share throughout the study period.

Table 4.3 : Components of Capital Structure - Year Wise Analysis - Healthcare Industry (Small Cap)

year	Equi	Equity Share Capital			Preference Share Capital		Reta	ined Earı	nings	Debentures		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	41.4	22.2	53.71	0.0	0.0	0.0	2.1	3.3	154.63	51.0	55.3	108.40
2003-2004	43.3	26.5	61.23	0.0	0.0	0.0	1.8	3.3	178.26	39.4	45.2	114.82
2004-2005	55.5	53.3	96.08	0.0	0.0	0.0	-3.6	13.9	-383.30	54.0	43.7	80.88
2005-2006	55.5	53.3	96.15	0.0	0.0	0.0	1.3	4.0	297.18	76.1	69.7	91.55
2006-2007	58.0	52.3	90.17	0.0	0.0	0.0	3.5	5.1	144.98	87.7	73.4	83.72
2007-2008	58.0	52.3	90.11	0.0	0.0	0.0	1.5	6.0	412.57	150.4	96.4	64.05
2008-2009	59.5	55.6	93.46	0.0	0.0	0.0	0.4	3.7	1035.18	147.5	109.1	73.93
2009-2010	59.5	55.6	93.46	0.0	0.0	0.0	1.2	1.6	126.56	165.6	122.5	73.98
2010-2011	109.5	166.9	152.48	0.0	0.0	0.0	7.2	7.4	102.31	199.5	150.9	75.62
2011-2012	109.5	166.9	152.48	0.0	0.0	0.0	11.1	20.8	187.39	251.8	245.1	97.33
2012-2013	159.5	278.7	174.72	0.0	0.0	0.0	5.1	17.2	335.80	222.0	184.9	83.30
2013-2014	179.9	323.1	179.64	0.0	0.0	0.0	-269.0	595.7	-221.43	207.5	203.3	97.97
2014-2015	179.9	323.1	179.64	0.0	0.0	0.0	-33.9	92.7	-273.07	204.7	204.2	99.72
2015-2016	179.9	323.1	179.64	0.0	0.0	0.0	-48.9	93.9	-192.03	223.3	207.2	92.80
2016-2017	179.9	323.1	179.64	0.0	0.0	0.0	-32.8	98.1	-299.51	210.2	200.0	95.18
Grand mean		101.91			0.00			-23.53			152.71	

#### 4.2.1.b Company Wise Analysis

## Components of Capital Structure - Healthcare Industry under Large Cap

The company wise analysis of components of healthcare industry under large cap group is presented below. The mean value of ESC of select five companies are found to range between ₹375.8 million (Piramal) to ₹2984.8 million (Fortis). The overall mean value of ESC of large companies amounts to ₹1018.72 million. The ESC of Fortis is greater than the overall mean value. The co-efficient of variation across the five companies shows that the level of ESC has remained highly stable with Piramal, while it is highly instable with healthcare global due to the company highly raised their additional equity capital during the period of the study.

The mean value of PSC of select companies are found to range between ₹0.1 million (Healthcare global) to ₹142.32 million (Piramal). Cadila and Apollo has not raised preference share throughout the study period. The overall mean of PSC amounts to ₹37.67 million and the average PSC of Piramal and Fortis are above the overall average. The highest co-variance has been found in Healthcare global at 387.3 which implies the PSC of Healthcare global is instable. The lowest co-variance has been found in Piramal (159.39) showing the PSC as stable.

The mean value of retained earnings of select companies are found to range between ₹-9.11 million to ₹8369.74 million. The highest mean value is found with Piramal and lowest is found with Healthcare Global. The grand mean of retained earnings amounts to ₹2725.21 million. The retained earnings of Cadila and Piramal are above the overall average. The co-efficient of variation across the five companies shows that the level of retained earnings is highly stable with Healthcare global, while it is highly instable with Fortis. It is inferred that the company Fortis's earning capacity is highly fluctuating during the study period.

Out of the five companies, the mean value of debentures are found to range between ₹1036.68 (Healthcare Global) to ₹29164.48 (Piramal). The overall mean value of debentures of large companies amounts to ₹10972.42 million. The debentures of Piramal is greater than the overall mean. The maximum co-variance is found at 141.02 which denotes the debentures volatility of Piramal. It is inferred that the company piramal increasing their external financing during the period of the study. The minimum variation found in cadila with 71.28 showing the consistency of debentures.

**Table 4.4: Components of Capital Structure - Company Wise Analysis - Healthcare Industry** 

Company	Equity	Share Ca	pital	Prefere	ence Shar	re Capital	Ret	ained Earn	ings	]	Debentures	
						Large Cap	)					
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
Cadila	735.2	308.9	42.02	0.0	0.0	0.0	3936.7	3691.4	93.77	10057.5	7169.5	71.28
Piramal	375.8	34.0	9.06	142.3	226.8	159.39	8369.7	33076.2	395.19	29164.5	41129.0	141.02
Apollo	587.3	114.4	19.47	0.0	0.0	0.0	1216.7	907.4	74.58	8202.9	8295.5	101.13
Fortis	2984.8	1581.8	53	46.0	74.0	161.05	112.1	718.2	640.87	6400.6	4814.4	75.22
Healthcare	410.5	328.2	79.94	0.1	0.3	387.3	-9.1	76.9	-844.09	1036.7	1140.2	109.99
<b>Grand Mean</b>		1018.72		37.67				2725.21			10972.42	
					Mid cap							
Poly Medicure	127.6	108.3	84.85	0.0	0.0	0.0	166.4	141.5	85.03	428.0	270.8	63.27
Indraprastha	916.7	0.0	0.00	0.0	0.0	0.0	77.5	49.3	63.63	513.4	182.1	35.46
TTK	75.3	5.9	7.81	0.0	0.0	0.0	71.3	61.5	86.37	219.3	93.4	42.58
KMCH	30.6	1.3	4.27	0.0	0.0	0.0	108.2	176.6	163.25	90.7	82.4	90.85
Amrutanjan	109.4	0.1	0.04	0.0	0.0	0.0	148.9	173.6	116.58	1046.0	800.2	76.5
Grand mean		251.91			0.00			114.45			459.48	
						Small cap	)					
Transgene	372.6	284.5	76.36	0.0	0.0	0.0	-127.5	344.1	-269.78	142.4	50.0	35.13
Agarwal's Eye	42.2	6.1	14.49	0.0	0.0	0.0	12.8	20.5	159.75	195.8	129.1	65.94
Elder	40.0	0.0	0	0.0	0.0	0.0	-4.5	22.9	-508.2	339.7	189.9	55.91
Sharma	32.8	0.1	0.11	0.0	0.0	0.0	2.1	2.4	114.2	62.6	31.0	49.56
ADS	21.9	0.1	0.19	0.0	0.0	0.0	-0.5	1.9	-365.11	23.1	8.7	37.8
<b>Grand Mean</b>		101.91		0.00		-23.53			152.71			

# **Components of Capital Structure - Healthcare Industry under Mid Cap**

The company wise analysis of components of healthcare industry under mid cap group is presented below. The mean value of ESC of select five companies are found to range between ₹30.59 million (KMCH) to ₹916.70 million (Indraprastha). The overall mean value of ESC of mid cap companies amounts to 251.91. The ESC of Indraprastha is greater than the overall mean. The co-efficient of variation across the five companies shows that the level of ESC has remained highly stable with Indraprastha, while it is highly instable with Poly medicure due to the company highly raised their additional capital during the study period.

The PSC of mid cap companies in healthcare industry shows that the companies have not raised any preference shares during the study period. It indicates that the mid cap companies in healthcare industry highly dependent on other source of fund.

The mean value of retained earnings of select companies are found to range between ₹71.25 million to ₹166.40 million .The highest mean value found with Poly medicure and lowest is found with TTK. The grand mean of retained earnings amounts to ₹114.45 million. The retained earnings of Poly medicure and Amrutanjan are above the overall average. The highest co-variance has been found in KMCH at 163.25 which implies the low level of consistency. It is inferred that the growth of retined earning is comparatively high. The least co-variance has been found in Indraprastha (63.63) showing the high level of consistency in retained earnings.

The mean value of debentures are found to range between ₹90.71 million (KMCH) to ₹1046.01 million (Amrutanjan). The overall mean value of debentures of mid cap companies amounts to ₹459.48 million. Thg₁debentures of Indraprastha and Amrutanjan are greater than the overall mean. The maximum co-variance found at 90.85 which denotes the debentures volatility of KMCH. It inferred that the company highly raised their additional external finance during the study period. The minimum variation found in Indraprastha with 35.46 showing the consistency level of debentures.

## Components of Capital Structure - Healthcare Industry under Small Cap

The company wise analysis of components of healthcare industry under small cap group is presented below. The mean value of ESC of five companies are found to range between ₹372.59 million (Transgenee) to ₹21.92 million (ADS). The overall mean value of ESC of small cap companies amounts to ₹101.91 million. The ESC of Transgene is greater than the overall mean. The highest co-variance has been found at 76.36 which implies the ESC is instable in Transgene and the least co-variance has been found in Elder (0.00) showing the ESC as stable.

The PSC of small cap companies in healthcare industry shows that the companies have not raised any preference shares during the study period. It indicates that the small cap companies in healthcare industry are highly dependent on other sources of fund.

The mean value of retained earnings are found to range between ₹-127.55 million to ₹12.83 million. The highest mean value found with Agarwal and lowest is found with Transgene. The overall mean of retained earnings amounts to ₹-23.53 million. The retained earnings of all companies are above the overall average except Transgene. The co-efficient of variation across the five companies shows that the level of retained earnings has remained highly stable in Elder, while it is highly instable in Agarwal. It inferred that the growth of retained earnings is high during the study period.

The mean value of debentures are found to range between ₹23.06 million (ADS) to ₹339.71 million (Elder). The overall mean value of debentures of small cap companies amounts to ₹152.71 million. The debentures of Agarwal and Elder are greater than the overall mean. The maximum co-variance found at 65.94 which denotes the debentures volatility of Agarwal. The minimum variation found in Transgene with 35.13 showing the consistency level of debentures.

## 4.2.1.c ANALYSIS OF VARIANCE

#### **Equity Share Capital - Healthcare Industry under Large Cap**

**Ho**: There is no significant mean difference of equity share capital among the select large cap companies of healthcare industry.

Table 4.5 : ANOVA : Equity Share Capital - Healthcare Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	7.37E+07	4	1.84E+07	33.889	**
Within Groups	3.81E+07	70	5.44E+05		
Total	1.12E+08	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 33.889 which is significant at one per cent level. It indicates that, the equity share capital vary significantly among the select large cap companies of healthcare industry. Hence the null hypothesis is rejected.

## Preference Share Capital - Healthcare Industry under Large Cap

**Ho**: There is no significant mean difference of preference share capital among the select large cap companies of healthcare industry.

Table 4.6 : ANOVA : Preference Share Capital - Healthcare Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.79E+06	4	4.46E+05	13.536	**
Within Groups	2.31E+06	70	3.30E+04		
Total	4.09E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 13.536 which is significant at one per cent level. It indicates that, the preference share capital vary significantly among the select large cap companies of healthcare industry. Hence the null hypothesis is rejected.

## Retained Earnings - Healthcare Industry under Large Cap

**Ho**: There is no significant mean difference of retained earnings among the select large cap companies of healthcare industry

Table 4.7 : ANOVA : Retained Earnings - Healthcare Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	7.49E+08	4	1.87E+08	0.844	NS
Within Groups	1.55E+10	70	2.22E+08		
Total	1.63E+10	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 0.844 which is found not to be significant. It indicates that, the retained earnings does not vary significantly among the select large cap companies of healthcare industry. Hence the null hypothesis is accepted.

## **Debentures - Healthcare Industry under Large Cap**

**Ho**: There is no significant mean difference of debentures among the select large cap companies of healthcare industry.

Table 4.8 : ANOVA : Debentures - Healthcare Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	6.89E+09	4	1.72E+09	4.687	**
Within Groups	2.57E+10	70	3.67E+08		
Total	3.26E+10	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 4.687 which is significant at one per cent level. It indicates that, the debentures vary significantly among the select large cap companies of healthcare industry. Hence the null hypothesis is rejected.

From the above, it is concluded that ESC, PSC and debentures are the components which is significantly differ among the large cap companies in healthcare industry. It indicates that these components are plays a major role in capital structure of large cap companies in healthcare industry.

## **Equity Share Capital - Healthcare Industry under Mid Cap**

**Ho**: There is no significant mean difference of equity share capital among the select mid cap companies of healthcare industry.

Table 4.9: ANOVA: Equity Share Capital - Healthcare Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	8.37E+06	4	2.09E+06	889.151	**
Within Groups	1.65E+05	70	2.35E+03		
Total	8.53E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 889.151 which is significant at one per cent level. It indicates that, the equity share capital vary

significantly among the select mid cap companies of healthcare industry. Hence the null hypothesis is rejected.

## Preference Share Capital - Healthcare Industry under Mid Cap

**Ho**: There is no significant mean difference of preference share capital among the select mid cap companies of healthcare industry.

**Table 4.10 : ANOVA : Preference Share Capital - Healthcare Industry (Mid Cap)** 

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	6.38E+02	4	1.60E+02	1.00	NS
Within Groups	1.12E+04	70	1.60E+02		
Total	1.18E+04	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 1.00 which is found not to be significant. It indicates that, the preference share capital does not vary significantly among the select mid cap companies of healthcare industry. Hence the null hypothesis is accepted.

## **Retained Earnings- Healthcare Industry under Mid Cap**

**Ho**: There is no significant mean difference of retained earnings among the select mid cap companies of healthcare industry.

Table 4.11: ANOVA: Retained Earnings- Healthcare Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.07E+05	4	2.68E+04	1.532	NS
Within Groups	1.23E+06	70	1.75E+04		
Total	1.33E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 1.532 which is found not to be significant. It indicates that, the retained earnings does not vary significantly among the select mid cap companies of healthcare industry. Hence the null hypothesis is accepted.

# **Debentures - Healthcare Industry under Mid Cap**

**Ho**: There is no significant mean difference of debentures among the select mid cap companies of healthcare industry.

Table 4.12 : ANOVA : Debentures - Healthcare Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	8.12E+06	4	2.03E+06	13.323	**
Within Groups	1.07E+07	70	1.52E+05		
Total	1.88E+07	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F-ratio 'between companies' is 13.323 which is significant at one per cent level. It indicates that, the debentures vary significantly among the select mid cap companies of healthcare industry. Hence the null hypothesis is rejected.

From the above analysis, it is concluded that ESC and debentures have significant mean difference among the mid cap companies in healthcare industry. It shows that ESC and debentures are the components that plays a predominant role in mid cap companies of healthcare industry.

## **Equity Share Capital - Healthcare Industry under Small Cap**

**Ho**: There is no significant mean difference of equity share capital among the select small cap companies of healthcare industry.

Table 4.13 : ANOVA : Equity Share Capital - Healthcare Industry (Small Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.38E+06	4	3.44E+05	21.262	**
Within Groups	1.13E+06	70	1.62E+04		
Total	2.51E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 21.262 which is significant at one per cent level. It means that, the equity share capital vary significantly among the select small cap companies of healthcare industry. Hence the null hypothesis is rejected.

#### **Retained Earnings - Healthcare Industry under Small Cap**

**Ho**: There is no significant mean difference of retained earnings among the select small cap companies of healthcare industry.

Table 4.14 : ANOVA : Retained Earnings - Healthcare Industry (Small Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	2.05E+05	4	5.13E+04	2.15	NS
Within Groups	1.67E+06	70	2.39E+04		
Total	1.88E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 2.15 which is found to be not significant. It indicates that, the retained earnings does not vary significantly among the select small cap companies of healthcare industry. Hence the null hypothesis is accepted.

## **Debentures - Healthcare Industry under Small Cap**

**Ho**: There is no significant mean difference of debentures among the select small cap companies of healthcare industry.

Table 4.15 : ANOVA : Debentures - Healthcare Industry (Small Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	9.28E+05	4	2.32E+05	20.609	**
Within Groups	7.88E+05	70	1.13E+04		
Total	1.72E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F-ratio 'between companies' is 20.609 which is significant at one per cent level. It means that, the debentures vary significantly among the select small cap companies of healthcare industry. Hence the null hypothesis is rejected.

From the above, it is concluded that ESC and debentures are the components have significant mean difference among the small cap companies in healthcare industry. It indicates that capital structure of small cap companies in healthcare industry are using ESC and debentures as one of their main sources of funds.

# **4.2.2 Hotel Industry**

## 4.2.2.a Year Wise Analysis

#### Components of Capital Structure - Hotel Industry under Large Cap

Table 4.16 reveals the year wise analysis of components of large cap companies in hotel industry for the period from 2002-03 to 2016-17.

The Mean value of ESC has been found to be highest in the year 2016-17 with ₹863.04 million and the lowest mean value is found in the year 2002-03 with ₹ 346.58 million. The mean value of ESC shows an increasing trend throughout the study period. The overall average of ESC amounts to ₹603.52 million. The average ESC from 2009-10 to 2016-17 are greater than the mean value from 2002-03 to 2008-09. The highest covariance has been found in the year 2004-05 at 77.30 which implies the low level of consistency of ESC and the lowest co-variance has been found in the year 2016-17 with 34.08 showing the high level of consistency in ESC.

The Mean value of PSC has been found to be highest in the year 2002-03 and the mean remained constant at ₹1.18 million during the period from 2009-10 to 2013-14. In the year 2006-07 there is no PSC has been raised. The overall average of PSC is ₹122.98 million. The co-efficient of variation of PSC has remained stable during the year 2002-03 (137.24). Volatility is found to be high during the year 2014-15 (225.0).

The mean value of retained earnings is found to range between ₹-1750.38 million and ₹1108.50 million. The highest mean value is found in the year 2007-08 and lowest value is found in the year 2013-14. The average of retained earnings shows fluctuating trend throughout the study period. The overall average of retained earnings amounts to ₹136.03 million. High level of consistency of retained earnings is found in the year 2014-15 and low level of consistency found in the year 2015-16.

Average of debentures has been found highest in the year 2014-15 with ₹18304.10 million and the lowest has found in the year 2002-03 with ₹4594.66 million. The mean value of debentures shows fluctuating trend throughout the study period. The overall average of debentures is ₹12077.72 million. The highest co-variance has been found in the year 2014-15 with 120.29 which implies the low level of consistency of debentures and the lowest co-variance has been found in the year 2006-07 with 63.57 showing the high level of consistency in the debentures.

Thus the components of capital structure for hotel industry of large cap companies shows that the ESC shows an increasing trend whereas retained earnings and debentures shows an fluctuating trend throughout the study period.

Table 4.16 : Components of Capital Structure - Year Wise Analysis - Hotel Industry (Large Cap)

year	Equity	Share Ca	apital	Pre	ference SI Capital	hare	Reta	nined Ear	nings	Debentures		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	346.6	256.5	74.00	380.0	521.5	137.24	346.6	256.5	74.00	4594.7	3862.6	84.07
2003-2004	346.7	256.3	73.92	300.0	412.3	137.43	91.5	84.2	92.02	6071.6	5798.4	95.50
2004-2005	370.2	286.2	77.30	153.5	343.2	223.58	240.3	184.4	76.73	5322.2	4586.5	86.18
2005-2006	405.6	291.8	71.96	77.5	173.3	223.61	626.1	490.2	78.29	4951.1	4524.9	91.39
2006-2007	462.7	340.7	73.63	0.0	0.0	0.00	1003.6	786.7	78.39	6206.2	3945.4	63.57
2007-2008	516.9	282.8	54.72	207.7	464.5	223.64	1108.5	911.3	82.21	9124.7	7336.2	80.40
2008-2009	541.0	296.8	54.86	211.2	472.2	223.58	864.2	536.6	62.10	11634.9	9475.4	81.44
2009-2010	621.1	236.5	38.07	1.2	2.6	216.67	319.6	263.3	82.38	14557.1	12672.0	87.05
2010-2011	714.5	332.9	46.58	1.2	2.6	216.67	380.8	236.7	62.14	15267.3	15191.0	99.50
2011-2012	714.6	332.8	46.57	1.2	2.6	216.67	469.2	168.6	35.94	17332.7	17146.9	98.93
2012-2013	736.7	338.1	45.89	1.2	2.6	216.67	-1441.5	2317.1	-160.75	16776.9	19085.8	113.76
2013-2014	756.8	330.9	43.72	1.2	2.6	216.67	-1750.4	3165.0	-180.82	17818.9	20521.4	115.17
2014-2015	800.6	322.4	40.27	8.8	19.8	225.00	-702.0	2061.4	-293.64	18304.1	22018.5	120.29
2015-2016	855.6	294.3	34.40	250.0	559.0	223.60	9.5	1243.1	13112.71	16808.6	16750.2	99.65
2016-2017	863.0	294.1	34.08	250.0	559.0	223.60	474.5	1078.2	227.25	16394.9	16090.1	98.14
Grand mean		603.52		122.98		136.03			12077.72			

#### Components of Capital Structure - Hotel Industry under Mid Cap

Table 4.17 shows the year wise analysis of components of mid cap companies in hotel industry for the period from 2002-03 to 2016-17.

The Mean value of ESC has been found to be high and constant in the years from 2012-13 to 2016-17 with ₹215.10 million and the lowest mean value found in the years 2003 and 2004 with ₹ 145.64 million. The mean value of ESC shows an increasing trend in most of the study period. The overall average of ESC is ₹190.63 million. The average ESC in the years 2007-09 and 2011-17 are greater than the overall mean. The co-efficient of variation is found that the ESC has remained stable during the year 2010-11 and 2011-12 with 27.22. Volatility is found to be high during the years from 2002-03 to 2003-07 at 38.98.

The Mean value of PSC has been found to be highest in the year 2010-11 and the mean value remained constant at ₹9.8 million during the period from 2011-12 to 2012-13. In the years 2003-07 and in 2014-17, PSC has not been raised. The overall average of PSC amounts to ₹8.79 million. The average PSC during most of the years is greater than the overall mean. From co-efficient of variation, it is found that the PSC has remained stable during the year 2010-11 at 149.66. Volatility is found to be high during the year 2009-10 at 223.66.

The Mean value of retained earnings has been found to be highest in the year 2007-08 with ₹435.68 million and the lowest mean value found in the year 2013-14. The average retained earnings shows a fluctuating trend throughout the study period. The overall average of retained earnings is ₹126.05 million. High level of consistency is found in the year 2014-15 and low level of consistency found in the year 2003-04 at 443.45.

Average of debentures has been found highest in the year 2015-16 with ₹3235.06 million and the lowest has found in the year 2002-03 with ₹895.22 million. The mean value of debentures shows a fluctuating trend throughout the study period. The overall average of debentures amounts to ₹2038.42 million and the average debentures in the years from 2010-11 to 2016-17 are greater than the mean value from 2002-03 to 2009-10. High level of consistency is found in the year 2009-10 at 28.41 and low level of consistency is found in the year 2002-03 at 144.19.

Thus the components of capital structure of mid cap companies in hotel industry shows that all the components have fluctuating trend throughout the study period. The mid cap companies in hotel industry is using debentures as one of their main sources of funds.

Table 4.17 : Components of Capital Structure - Year Wise Analysis - Hotel Industry (Mid Cap)

year	Equity	Share (	Capital	Pı	reference S Capital		Reta	ained Earn	ings	Debentures		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	145.6	56.8	38.98	0.0	0.0	0.00	145.6	56.8	38.98	895.2	1290.8	144.19
2003-2004	145.6	56.8	38.98	0.0	0.0	0.00	11.5	51.0	443.45	926.6	1257.5	135.72
2004-2005	146.8	55.5	37.78	0.0	0.0	0.00	83.4	68.8	82.56	924.1	1007.9	109.06
2005-2006	181.9	69.7	38.31	0.0	0.0	0.00	182.3	123.1	67.54	1011.7	912.8	90.22
2006-2007	200.0	54.9	27.44	0.0	0.0	0.00	304.7	229.4	75.31	1138.9	1159.9	101.84
2007-2008	200.0	54.9	27.44	40.0	89.4	223.50	435.7	501.8	115.18	1005.5	1046.4	104.07
2008-2009	200.0	54.9	27.44	20.0	44.7	223.50	337.7	341.8	101.22	1388.7	791.6	57.01
2009-2010	177.2	63.4	35.77	22.4	50.1	223.66	119.0	86.1	72.37	1726.7	490.6	28.41
2010-2011	193.3	52.6	27.22	29.8	44.6	149.66	137.1	112.6	82.17	2630.7	1916.6	72.85
2011-2012	193.3	52.6	27.22	9.8	21.9	223.47	123.2	129.5	105.11	3102.6	2046.5	65.96
2012-2013	215.1	72.6	33.77	9.8	21.9	223.47	106.8	110.4	103.39	3084.0	2615.2	84.80
2013-2014	215.1	72.6	33.77	0.0	0.0	0.00	-110.3	181.4	-164.43	3143.1	3439.1	109.42
2014-2015	215.1	72.6	33.77	0.0	0.0	0.00	-76.7	245.9	-320.72	3214.0	3492.0	108.65
2015-2016	215.1	72.6	33.77	0.0	0.0	0.00	19.9	163.4	819.56	3235.1	3718.1	114.93
2016-2017	215.1	72.6	33.77	0.0	0.0	0.00	70.9	201.5	284.21	3149.5	3792.5	120.42
Grand mean		190.63			8.79		126.05			2038.42		

#### Components of Capital Structure - Hotel Industry under Small Cap

Table 4.18 depicts the year wise analysis of components of small cap companies in hotel industry for the period from 2002-03 to 2016-17.

The highest mean value of ESC has been found to be constant in the years from 2013-14 to 2016-17 with ₹157.94 million and the lowest mean value is found in the year from 2004-05 to 2006-07 with ₹82.0 million. The mean value of ESC shows an increasing trend in most of the years. The overall average of ESC is ₹119.70 million. The average ESC from 2009-10 to 2016-2017 are greater than the mean value from 2002-03 to 2008-09. The highest co-variance has been found in the years 2014-2017 which implies that the low level of consistency and the lowest co-variance has been found in the years from 2004- 05 to 2006- 07 showing the high level of consistency in ESC.

The PSC of small cap companies in hotel industry shows that the companies have not raised any preference shares during the study period from 2002-03 to 2016-17. It indicates that the small cap companies in hotel industry are highly dependent on other sources such as ESC, retained earnings and debentures.

The Mean value of retained earnings has been found to be highest in the year 2007-08 with ₹161.92 million and the lowest mean value found in the year 2004-05 with ₹-25.26 million. The overall average of retained earnings amounts to ₹32.58 million. The coefficient of variation is found that the ESC has remained stable during the year 2013-14. Volatility is found to be high during the year 2005-06 at 168.74.

Average of debentures has been found to be highest in the year 2013-14 with ₹801.40 million and the lowest has been found in the year 2005-06 with ₹262.08 million. The mean value of debentures shows fluctuating trend throughout the study period. The overall average of debentures amounts to ₹503.27 million and the average debentures during the year from 2011-12 to 2016-17 are greater than the mean value from 2002-03 to 2010-11. The highest co-variance has been found in the year 2016-17 at 200.17 which implies that the low level of consistency and the lowest co-variance has been found in the year 2002-03 at 54.09 showing the high level of consistency in debentures.

It concludes that the components of capital structure of small cap companies in hotel industry shows that ESC shows an increasing trend while retained earnings and debentures shows a fluctuating trend throughout the study period. The companies in small cap group has not raised any preference share in the study period.

Table 4.18 : Components of Capital Structure - Year Wise Analysis - Hotel Industry (Small Cap)

year	Equity Share Capital		apital	Preference Share Capital			Retained Earnings			Debentures		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	82.5	17.4	21.11	0.00	0.00	0.00	59.6	41.9	70.34	280.7	151.8	54.09
2003-2004	82.5	17.4	21.11	0.00	0.00	0.00	-25.3	37.3	-147.81	299.5	174.9	58.38
2004-2005	82.0	16.7	20.37	0.00	0.00	0.00	-6.6	30.8	-463.44	320.3	211.6	66.06
2005-2006	82.0	16.7	20.37	0.00	0.00	0.00	37.0	62.4	168.74	262.1	196.6	75.03
2006-2007	82.0	16.7	20.37	0.00	0.00	0.00	96.3	132.9	137.98	466.4	439.4	94.21
2007-2008	116.0	46.7	40.25	0.00	0.00	0.00	161.9	256.2	158.20	363.7	311.9	85.76
2008-2009	118.0	46.1	39.07	0.00	0.00	0.00	38.7	45.5	117.33	344.7	390.4	113.24
2009-2010	121.0	49.6	40.94	0.00	0.00	0.00	43.8	71.3	162.85	481.6	740.6	153.78
2010-2011	134.7	38.9	28.85	0.00	0.00	0.00	42.6	36.4	85.36	384.9	592.9	154.05
2011-2012	134.7	38.9	28.85	0.00	0.00	0.00	49.1	45.0	91.75	642.6	1151.4	179.16
2012-2013	128.3	33.3	25.91	0.00	0.00	0.00	49.5	61.2	123.66	669.0	1221.7	182.62
2013-2014	157.9	96.1	60.82	0.00	0.00	0.00	-3.5	20.8	-594.51	801.4	1473.8	183.90
2014-2015	157.9	96.1	60.82	0.00	0.00	0.00	-20.8	53.5	-257.38	795.0	1495.5	188.12
2015-2016	157.9	96.1	60.82	0.00	0.00	0.00	-14.4	58.6	-406.06	728.9	1413.0	193.85
2016-2017	157.9	96.1	60.82	0.00	0.00	0.00	-19.2	80.1	-416.96	708.4	1418.0	200.17
Grand mean		119.70			0.00		32.58			503.27		

#### 4.2.2.b Company Wise Analysis

# **Components of Capital Structure - Hotel Industry under Large Cap**

The company wise analysis of components of hotel industry under large cap group is presented below. The mean value of ESC is found to range between ₹210.14 million (Thomas cook) to ₹882.73 million (EIH). The overall mean value of ESC of large cap companies amounts to ₹603.52 million. The ESC of Indian hotels, EIH and Leelaventure are greater than the overall mean. The co-efficient of variation across the five companies shows that the level of ESC has remained highly stable in Leeleventure (13.70), while it is highly instable in Cox and Kings (78.95). It observed that the company Cox and King highly raised their owner's capital during the study period.

The highest mean value of PSC has been found in Thomas cook with ₹311.22 million and the lowest mean value is found in EIH with ₹113.33 million. Indian hotels and Cox & Kings are not issued any PSC throughout the study period. The grand mean of PSC amounts to 122.98 million and the average PSC of Thomas cook and Leeleventure are above the overall mean value. The co-efficient of variation across the five companies shows that the level of PSC has remained highly stable in Thomas cook (168.89), while it is highly instable in EIH (268.60).

The mean value of retained earnings is found to range between ₹-647.95 million to ₹563.93 million. The highest mean value is found in Leelaventure and lowest is found in Cox & Kings. The overall mean value of retained earnings amounts to ₹136.03 million. The retained earnings of EIH, Cox & Kings and Thomas cook are above the overall average. The co-efficient of variation across the five companies shows that the high level of consistency is found in Leelaventure whereas high variation is found in Indian hotels.

The mean value of debentures is <sup>6</sup>found to range between ₹2174.03 million (Thomas cook) to ₹28718.70 million (Leelaventure). The overall mean value of debentures of large companies amounts to ₹12077.72 million. The debentures of Indian hotels and Leelaventure are greater than the overall mean. The maximum co-variance is found at 100.07 million which denotes the debentures volatility of Cox & Kings. The minimum variation is found in Indian hotels with 45.35 showing the consistency level of debentures.

**Table 4.19 : Components of Capital Structure - Company Wise Analysis - Hotel Industry** 

Company	Equit	y Share Ca	pital	Prefer	ence Shar	e Capital	Re	tained Earni	ngs		Debentures	
						Large Cap	)					
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
Indian Hotels	699.3	175.2	25.05	0.0	0.0	0.0	91.0	2146.7	2358.53	18543.7	8409.4	45.35
EIH	882.7	270.9	30.68	113.3	304.4	268.6	482.2	587.6	121.84	6315.4	3233.2	51.2
Cox & Kings	442.0	349.0	78.95	0.0	0.0	0.0	563.9	518.5	91.94	4636.8	4640.2	100.07
Thomas cook	210.1	75.5	35.91	311.2	525.6	168.89	191.0	180.0	94.29	2174.0	1543.2	70.98
Leelaventure	783.5	107.3	13.7	190.3	190.3 342.9 180.14		-648.0	2052.4	-316.75	28718.7	16857.2	58.7
Grand mean		603.52		122.98				136.03			12077.72	
						Mid cap						
Asian Hotels(N)	204.8	30.2	14.74	37.3	59.1	158.61	243.3	446.6	183.57	5008.6	3235.5	64.6
Taj GVK	125.4	0.0	0.0	0.0	0.0	0.00	191.4	152.3	79.6	1479.6	898.8	60.74
Oriental	178.6	0.0	0.0	0.0	0.0	0.00	38.0	138.7	364.66	1556.2	1437.8	92.39
EIH associated	207.9	80.2	38.58	6.7	25.8	387.3	102.4	101.8	99.42	1493.6	917.9	61.45
Royal Orchid	236.5	74.2	31.38	0.0	0.0	0.00	55.2	100.1	181.38	654.1	562.4	85.98
Grand mean		190.63			8.79			126.05			2038.42	
						Small cap						
Country club	184.0	96.5	52.44	0.0	0.0	0.0	88.9	195.2	219.58	1783.3	1248.4	70.01
Graviss	128.0	44.4	34.7	0.0	0.0	0.0	17.1	55.2	323.2	265.8	218.1	82.08
Advani	92.4	0.0	0.0	0.0	0.0	0.0	26.1	24.5	94.04	167.2	79.2	47.37
Savera	87.5	30.8	35.25	0.0	0.0	0.0	21.5	24.2	112.49	211.8	68.2	32.18
Reliable	106.6	4.6	4.28	0.0	0.0 0.0 0.0		9.4 11.2 119.58		8 88.4 44.8		50.65	
Grand Mean		119.70		0.00				32.58		503.27		

#### Components of Capital Structure - Hotel Industry under Mid Cap

The company wise analysis of components of hotel industry under mid cap group is presented below. The mean value of ESC is found to range between ₹236.46 million (Royal orchid) to ₹125.40 million (Taj GVK). The overall mean value of ESC of mid cap companies amounts to ₹190.63 million. The ESC of Asian (N), EIH asso and Royal orchid are greater than the overall mean value. The co-efficient of variation across the five companies shows that the level of ESC has remained highly stable in Taj GVK and Oriental, while it is highly instable in EIH associates and it is inferred that the company highly raised their equity share capital during the study period.

The highest mean value of PSC is found in Asian (N) with ₹37.27 million and lowest is found in EIH associates with ₹6.67 million. Other companies have not raised any preference shares throughout the study period. The overall mean of PSC amounts to ₹8.79 million and the average PSC of Asian hotels is above the overall average. High level of consistency is found in Asian (N) and low level of consistency is found in EIH associates.

The mean value of retained earnings of select companies is found to range between ₹38.03 million to ₹243.27 million. The highest mean value is found in Asian (N) and lowest is found in Oriental. The overall mean of retained earnings is amounts to ₹126.05 million. The retained earnings of Asian (N) is above the overall average. The Maximum co-variance has been found in Oriental at 364.66 which implies that the low level of consistency and the lowest co-variance has been found in Taj GVK showing the high level of consistency in retained earnings.

The mean value of debentures is found to range between ₹654.08 million (Royal orchid) to ₹5008.59 million (Asian (N)). The overall mean value of debentures of mid cap companies amounts to ₹2038.42 mgHion. The debentures of Asian (N) is greater than the overall mean. The maximum co-variance is found at 92.39 which denotes the volatility of debentures in Oriental. The minimum variation is found in Taj GVK with 60.74 showing the consistency level of debentures.

## Components of Capital Structure - Hotel Industry under Small Cap

The company wise analysis of components of hotel industry under small cap group is presented below. The mean value of ESC of select five companies are found to range between

₹184.04 million (Country club) to ₹87.46 million (Savera). The overall mean value of ESC of small cap companies amounts to ₹119.70 million. The ESC of Country club and Gravis greater than the overall mean. The co-efficient of variation across the five companies shows that the level of ESC has remained highly stable in Advani, while it is highly instable in Country club. It inferred that the company highly raised their equity share capital during the period of the study.

The PSC of small cap companies in hotel industry shows that the companies have not raised any preference shares during the study period. It indicates that the small cap companies in hotel industry are highly dependent on other sources of fund.

The mean value of retained earnings is found to range between ₹88.89 million to ₹9.35 million. The highest mean value is found in Country club and lowest is found in Reliable. The overall mean of retained earnings is amounts to ₹32.58 million. The retained earnings of Country club is above the overall average. The highest co-variance has been found in Gravis at 323.20 which implies that the low level of consistency in retained earnings and the lowest co-variance has been found in Advani (94.04) showing high level of stability in retained earnings.

The mean value of debentures is found to range between ₹88.37 million (Reliable) to ₹1783.25 million (Country club). The overall mean value of debentures of small cap companies amounts to ₹503.27 million. The debentures of Country club is greater than the overall mean. The maximum co-variance is found at 82.08 which denotes the volatility of debentures in Gravis. The minimum variation is found in Savera with 32.18 showing the consistency level of debentures.

#### 4.2.2.c ANALYSIS OF VARIANCE

#### **Equity Share Capital - Hotel Industry under Large Cap**

**Ho**: There is no significant mean difference of equity share capital among the select large cap companies of hotel industry.

Table 4.20 : ANOVA : Equity Share Capital - Hotel Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	4.51E+06	4	1.13E+06	23.172	**
Within Groups	3.40E+06	70	4.86E+04		
Total	7.91E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 23.172 which is significant at one per cent level. It indicates that, the equity share capital vary significantly among the select large cap companies of hotel industry. Hence the null hypothesis is rejected.

## Preference Share Capital - Hotel Industry under Large Cap

**Ho**: There is no significant mean difference of preference share capital among the select large cap companies of hotel industry.

Table 4.21 : ANOVA : Preference Share Capital - Hotel Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.05E+06	4	2.64E+05	2.71	*
Within Groups	6.81E+06	70	9.73E+04		
Total	7.87E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 2.71 which is significant at five per cent level. It indicates that, the preference share capital vary significantly among the select large cap companies of hotel industry. Hence the null hypothesis is rejected.

#### Retained Earnings - Hotel Industry under Large Cap

**Ho**: There is no significant mean difference of retained earnings among the select large cap companies of hotel industry.

**Table 4.22 : ANOVA : Retained Earnings - Hotel Industry (Large Cap)** 

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.38E+07	4	3.46E+06	1.827	NS
Within Groups	1.33E+08	70	1.89E+06		
Total	1.46E+08	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 1.827 which is found not to be significant. It indicates that, the retained earnings does not vary significantly among the select large cap companies of hotel industry. Hence the null hypothesis is accepted.

## **Debentures - Hotel Industry under Large Cap**

**Ho**: There is no significant mean difference of debentures among the select large cap companies of hotel industry.

Table 4.23 : ANOVA : Debentures - Hotel Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	7.58E+09	4	1.90E+09	24.344	**
Within Groups	5.45E+09	70	7.79E+07		
Total	1.30E+10	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F-ratio 'between companies' is 24.344 which is significant at one per cent level. It means that, the debentures vary significantly among the select large cap companies of hotel industry. Hence the null hypothesis is rejected.

From the above analysis, it is concluded that equity share capital, preference share capital and debentures have significant mean difference among the large cap companies in hotel industry. It indicates that these components are highly influencing the capital structure of large cap companies in hotel industry.

#### **Equity Share Capital - Hotel Industry under Mid Cap**

**Ho**: There is no significant mean difference of equity share Capital among the select mid cap companies of hotel industry.

Table 4.24 : ANOVA : Equity Share Capital - Hotel Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	etween Groups 1.05E+05		2.62E+04	10.212	**
Within Groups	1.80E+05	70	2.57E+03		
Total	2.85E+05	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 10.212 which is significant at one per cent level. It indicates that, the equity share capital vary significantly among the select mid cap companies of hotel industry. Hence the null hypothesis is rejected.

## Preference Share Capital - Hotel Industry under Mid Cap

**Ho**: There is no significant mean difference of preference share capital among the select mid cap companies of hotel industry.

Table 4.25 : ANOVA : Preference Share Capital - Hotel Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.57E+04	4	3.93E+03	4.72	**
Within Groups	5.83E+04	70	8.32E+02		
Total	7.40E+04	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 4.72 which is significant at one per cent level. It indicates that, the preference share capital vary significantly among the select mid cap companies of hotel industry. Hence the null hypothesis is rejected.

# Retained Earnings- Hotel Industry under Mid Cap

**Ho**: There is no significant mean difference of retained earnings among the select mid cap companies of hotel industry.

Table 4.26 : ANOVA : Retained Earnings- Hotel Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	4.70E+05	4	1.17E+05	2.24	NS
Within Groups	3.67E+06	70	5.25E+04		
Total	4.14E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 2.24 which is found not to be significant. This shows that the retained earnings does not vary significantly among the select mid cap companies of hotel industry. Hence the null hypothesis is accepted.

#### **Debentures - Hotel Industry under Mid Cap**

**Ho**: There is no significant mean difference of debentures among the select mid cap companies of hotel industry.

Table 4.27 : ANOVA : Debentures - Hotel Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.74E+08	4	4.34E+07	14.971	**
Within Groups	2.03E+08	70	2.90E+06		
Total	3.77E+08	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F-ratio 'between companies' is 14.971 which is significant at one per cent level. It means that, the debentures vary significantly among the select mid cap companies of hotel industry. Hence the null hypothesis is rejected.

From the above, it is concluded that equity share capital, preference share capital and debentures are significantly differ among the mid cap companies in hotel industry. It shows that these components are plays a predominant role in capital structure of mid cap companies in healthcare industry.

## **Equity Share Capital - Hotel Industry under Small Cap**

**Ho**: There is no significant mean difference of equity share capital among the select small cap companies of hotel industry.

Table 4.28: ANOVA: Equity Share Capital - Hotel Industry (Small Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	9.25E+04	4	2.31E+04	9.431	**
Within Groups	1.72E+05	70	2.45E+03		
Total	2.64E+05	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 9.431 which is significant at one per cent level. This shows that the equity share capital vary significantly among the select small cap companies of hotel industry. Hence the null hypothesis is rejected.

#### **Retained Earnings- Hotel Industry under Small Cap**

**Ho**: There is no significant mean difference of retained earnings among the select small cap companies of hotel industry.

**Table 4.29: ANOVA: Retained Earnings- Hotel Industry (Small Cap)** 

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	etween Groups 6.17E+04		1.54E+04	1.818	NS
Within Groups 5.94E+05		70	8.49E+03		
Total	6.56E+05	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 1.818 which is found not to be significant. It indicates that, the retained earnings does not vary significantly among the select small cap companies of hotel industry. Hence the null hypothesis is accepted.

## **Debentures - Hotel Industry under Small Cap**

**Ho**: There is no significant mean difference of debentures among the select small cap companies of hotel industry.

Table 4.30 : ANOVA : Debentures - Hotel Industry (Small Cap)

	Sum of Squares		Mean Square	F	Sig
<b>Between Groups</b>	<b>Between Groups</b> 3.10E+07		7.74E+06	23.912	**
Within Groups	2.27E+07	70	3.24E+05		
Total	5.36E+07	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F-ratio 'between companies' is 23.912 which is significant at one per cent level. This shows that the debentures vary significantly among the select small cap companies of hotel industry. Hence the null hypothesis is rejected.

From the above analysis, it is concluded that the equity share capital and debentures are significantly differ among the small cap companies in hotel industry. This result indicates that these components are plays a major role in capital structure of small cap companies in hotel industry.

# 4.2.3 Software Industry

## 4.2.3.a Year Wise Analysis

## Components of Capital Structure - Software Industry under Large Cap

Table 4.31 shows the year wise analysis of components of large cap companies in software industry for the period of years from 2002-03 to 2016-17.

The Mean value of ESC has been found to be highest in the year 2015-16 with ₹2404.40 million and the lowest mean value is found in the year 2002-03 with ₹290.12 million. The mean value of ESC shows an increasing trend throughout the study period. The overall average of ESC amounts to ₹1444.07 million. The average ESC in the years from 2009-10 to 2016-17 are greater than the mean value in the year from 2002-03 to 2008-09. The maximum co-efficient of variation has been found in the year 2005-06 at 126.26 which implies that the high variability in ESC and the lowest co-variance has been found in the year 2016-17 with 66.51 showing the stability of ESC.

The PSC of large cap companies in software industry showing that only one company has raised the PSC during the years from 2007-08 to 2012-13. The average of PSC is constant at ₹200 million in the years 2008-2013. The co-efficient of variation stood constant at 223.61 which implies that the inconsistency of PSC.

The Mean value of retained earnings has been found to be highest in the year 2016-17 with ₹46351.92 million and the lowest mean value is found in the year 2003-04 with ₹398.04 million. The overall average of retained earnings is ₹18148.07 million. The average retained earnings in the years from 2011-12 to 2016-17 are greater than the mean value from 2002-03 to 2010-11. The highest co-variance has been found in the year 2003-04 at 168.95 which implies that the high variability and the lowest co-variance has been found in the year 2013-14 showing the high level of consistency in retained earnings.

Average of debentures has been found to be highest in the year 2015-16 with ₹15438.20 million and the lowest has been found in the year 2002-03 with ₹341.14 million. The mean value of debentures shows fluctuating trend throughout the study period. The average of debentures in the years from 2008-09 to 2016-17 are greater than the overall mean. High level of consistency is found in the year 2004-05 with 34.09 and low level of consistency is found in the year 2014-15 at 208.20.

From the above analysis, it is concluded that equity share capital shows an increasing trend whereas retained earnings and debentures shows the fluctuating trend throughout the study period. Results indicates that the large cap companies in software industry highly depend on retained earnings and debentures.

Table 4.31 : Components of Capital Structure - Year Wise Analysis - Software Industry (large Cap)

year	Equit	y Share C	apital	Pre	eference S Capital		Reta	Retained Earnings Debenture			Debentures	
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	290.1	256.3	88.35	0.00	0.00	0.00	2024.2	3350.7	165.53	341.1	301.9	88.48
2003-2004	312.3	236.5	75.74	0.00	0.00	0.00	398.0	672.5	168.95	1387.8	1335.6	96.24
2004-2005	591.0	505.7	85.58	0.00	0.00	0.00	4248.5	6719.4	158.16	807.5	275.3	34.09
2005-2006	886.7	1119.6	126.26	0.00	0.00	0.00	6617.5	8847.7	133.70	441.0	233.4	52.93
2006-2007	1198.5	1042.6	86.99	0.00	0.00	0.00	9923.5	10942.1	110.26	765.3	908.5	118.70
2007-2008	1240.1	1009.6	81.41	200.0	447.2	223.61	10448.6	13383.3	128.09	8148.7	16818.1	206.39
2008-2009	1243.3	1012.4	81.43	200.0	447.2	223.61	11791.2	14146.3	119.97	11633.1	21609.1	185.76
2009-2010	1446.7	1040.5	71.92	200.0	447.2	223.61	11801.4	15656.8	132.67	14142.7	23745.3	167.90
2010-2011	1847.0	1821.4	98.61	200.0	447.2	223.61	16606.1	19745.8	118.91	11979.3	20331.0	169.72
2011-2012	1852.4	1822.9	98.41	200.0	447.2	223.61	18956.0	22123.2	116.71	13204.4	22567.8	170.91
2012-2013	1858.9	1823.2	98.08	200.0	447.2	223.61	28821.2	31136.8	108.03	14086.0	26314.8	186.81
2013-2014	1862.9	1824.2	97.92	0.00	0.00	0.00	44239.5	45971.1	103.91	10617.4	19814.8	186.63
2014-2015	2231.0	1753.8	78.61	0.00	0.00	0.00	18574.8	20770.2	111.82	12924.9	26910.2	208.20
2015-2016	2404.4	1623.0	67.50	0.00	0.00	0.00	41418.6	55847.2	134.84	15438.2	29554.6	191.44
2016-2017	2395.7	1593.4	66.51	0.00	0.00	0.00	46351.9	53626.0	115.69	14311.6	27332.3	190.98
Grand mean		1444.07			80.00			18148.07			8681.95	

#### Components of Capital Structure - Software Industry under Mid Cap

Table 4.32 depicts the year wise analysis of components of mid cap companies in software industry for the period from 2002-03 to 2016-17.

The highest mean value of ESC has been found in the year 2016-17 with ₹2560.56 million and the lowest mean value is found in the year 2002-03 with ₹ 148.20 million. The mean value of ESC shows an increasing trend throughout the study period. The overall average of ESC is ₹751.61 million. The average ESC in the years from 2012-13 to 2016-2017 are greater than the overall mean. The highest co-variance has been found in the year 2016-17 at 202.59 which implies that the low level of consistency and the lowest co-variance has been found in the year 2004-05 showing the high level of consistency in ESC.

The PSC of mid cap companies in software industry showing that the companies has not raised any preference shares except one company during the study period from 2002-03 to 2016-17. It indicates that the mid cap companies in software industry are highly dependent on other sources. The co-variance has been found to be constant throughout the study period with 223.61 which showing the inconsistency level of PSC.

The Mean value of retained earnings has been found to be highest in the year 2008-09 with ₹819.84 million and the lowest mean value is found in the year 2014-15 with ₹-2410.22 million. The highest co-variance has been found in the year 2002-03 at 1346.60 which implies that the low level of consistency and the least co-variance has been found in the year 2015-16 showing the high level of consistency in retained earnings.

Average of debentures has been found to be highest in the year 2013-14 with ₹8489.84 million and the lowest has been found in the year 2002-03 with ₹593.48 million. The mean value of debentures shows fluctuating trend throughout the study period. The overall average of debentures amounts to ₹4205.76 million and the average debentures in the years from 2008-09 to 2014-15 are greater than the overall mean. The co-efficient of variation of debentures has remained stable during the year 2013-14 with 128.10. Volatility is found to be high during the year 2007-08 at 170.16.

Thus the components of capital structure of mid cap companies in software industry shows that equity share capital shows increasing trend while retained earnings and debentures shows an fluctuating trend throughout the study period.

Table 4.32 : Components of Capital Structure - Year Wise Analysis - Software Industry (Mid Cap)

year	Equit	y Share C	apital	Pre	ference Sh Capital	nare	Retained Earnings			Debentures		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	148.2	116.1	78.35	300.0	670.8	223.61	16.0	216.0	1346.60	593.5	879.4	148.18
2003-2004	155.6	111.7	71.77	300.0	670.8	223.61	-29.4	174.1	-592.67	739.0	1082.6	146.49
2004-2005	157.8	110.4	69.92	300.0	670.8	223.61	57.1	310.7	544.57	922.1	1289.6	139.86
2005-2006	223.8	182.2	81.41	200.0	447.2	223.61	94.8	255.4	269.33	1155.8	1772.8	153.39
2006-2007	233.3	194.1	83.19	200.0	447.2	223.61	335.3	415.4	123.90	1937.9	2633.2	135.87
2007-2008	384.4	517.8	134.70	200.0	447.2	223.61	592.2	314.8	53.15	3396.4	5779.3	170.16
2008-2009	385.8	518.0	134.24	200.0	447.2	223.61	819.8	664.4	81.04	4465.7	7352.6	164.65
2009-2010	457.3	689.2	150.72	200.0	447.2	223.61	144.6	949.5	656.76	5162.5	7774.4	150.59
2010-2011	547.6	778.7	142.19	200.0	447.2	223.61	529.0	499.5	94.44	5880.3	8322.2	141.53
2011-2012	548.1	778.5	142.03	200.0	447.2	223.61	-908.2	1587.3	-174.77	6918.0	9527.6	137.72
2012-2013	1305.6	2469.0	189.10	130.0	290.7	223.61	-1990.2	3717.1	-186.77	7640.4	9850.0	128.92
2013-2014	1306.1	2474.9	189.50	130.0	290.7	223.61	-1849.9	3268.4	-176.68	8489.8	10875.6	128.10
2014-2015	1386.8	2603.6	187.74	130.0	290.7	223.61	-2410.2	4915.5	-203.95	7784.6	11363.1	145.97
2015-2016	1473.2	2762.4	187.51	567.4	1268.7	223.61	-796.0	2646.9	-332.54	4029.6	5241.0	130.06
2016-2017	2560.6	5187.4	202.59	623.4	1394.0	223.61	622.5	633.7	101.81	3970.7	5363.4	135.08
Grand mean		751.61			258.72			-318.18			4205.76	

#### Components of Capital Structure - Software Industry under Small Cap

Table 4.33 shows the year wise analysis of components of small cap companies in software industry for the period from 2002-03 to 2016-17.

The Mean value of ESC has been found to be high in the year with ₹452.38 million and the lowest mean value is found in the year 2002-03 with ₹88.46 million. The mean value of ESC shows an increasing trend throughout the study period. The overall average of ESC is ₹245.83 million. The average ESC from the years 2011-12 to 2016-17 are greater than the mean value in the years from 2002-03 to 2010-11. The highest co-variance has been found in the year 2013-14 which implies that the high variability and the lowest co-variance has been found in the year 2006-07 with 11.89 showing the high level of consistency in ESC.

The PSC of small cap companies in software industry shows that the companies have not raised any preference shares during the study period from 2002-03 to 2016-17. It indicates that the small cap companies in software industry are highly dependent other sources.

The Mean value of retained earnings has been found to be highest in the year 2007-08 with ₹105.10 million and the lowest mean value is found in the year 2013-14. The overall average of debenture is ₹17.99 million. The average retained earnings in the years from 2003-04 to 2009-10 and 2011-12 are greater than the overall mean. The co-efficient of variation of retained earnings has remained stable during the year 2012-13. Volatility is found to be high during the year 2010-11 at 703.40.

Average of debentures has been found to be highest in the year 2013-14 with ₹291.82 million and the lowest has been found in the year 2004-05 with ₹85.76 million. The mean value of debentures shows fluctuating trend throughout the study period. The overall average of debenture is ₹206.77 million and the average debentures in the years from 2008-09 to 2016-17 are greater than the mean value in the years from 2002-03 to 2007-08. High level of consistency is found in the year 2005-06 with 45.67 and low level of consistency found in the year 2015-16 at 145.53.

Thus the components of capital structure of small cap companies in software industry indicates that equity share capital shows an increasing trend whereas retained earnings and debentures shows an fluctuating trend throughout the study period. Small cap companies in software industry has not raise any preference shares throughout the study period.

Table 4.33 : Components of Capital Structure - Year Wise Analysis - Software Industry (Small Cap)

year	Equi	ty Share (	Capital	Pre	ference Sh Capital	nare	Retained Earnings			Debentures		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	88.5	26.1	29.53	0.0	0.0	0.0	-12.1	33.5	-275.54	97.4	91.2	93.64
2003-2004	90.0	27.2	30.21	0.0	0.0	0.0	24.4	31.1	127.08	106.0	101.2	95.49
2004-2005	93.6	30.6	32.74	0.0	0.0	0.0	36.3	33.3	91.76	85.8	77.5	90.38
2005-2006	103.3	38.3	37.13	0.0	0.0	0.0	49.3	41.4	83.90	131.6	60.1	45.67
2006-2007	125.2	14.9	11.89	0.0	0.0	0.0	90.1	68.1	75.61	147.6	118.0	79.94
2007-2008	123.5	55.6	45.05	0.0	0.0	0.0	105.1	115.9	110.29	172.5	92.7	53.70
2008-2009	123.5	55.6	45.03	0.0	0.0	0.0	68.4	144.3	210.99	254.9	228.5	89.64
2009-2010	200.6	191.8	95.64	0.0	0.0	0.0	66.7	108.8	163.09	277.0	242.1	87.37
2010-2011	302.2	410.0	135.66	0.0	0.0	0.0	12.6	88.8	703.40	247.8	289.4	116.77
2011-2012	306.1	407.6	133.15	0.0	0.0	0.0	36.8	48.3	131.25	210.7	276.3	131.11
2012-2013	358.2	506.6	141.43	0.0	0.0	0.0	-16.8	77.8	-463.66	263.4	344.3	130.70
2013-2014	439.0	684.4	155.87	0.0	0.0	0.0	-57.2	146.1	-255.41	291.8	395.9	135.67
2014-2015	439.7	684.0	155.55	0.0	0.0	0.0	-51.2	122.8	-239.91	260.8	363.5	139.35
2015-2016	441.6	682.7	154.59	0.0	0.0	0.0	-39.1	99.6	-254.96	272.5	396.6	145.53
2016-2017	452.4	704.6	155.76	0.0	0.0	0.0	-43.6	95.4	-218.89	281.6	395.0	140.28
Grand mean		245.83			0.00			17.99			206.77	

#### 4.2.3.b Company Wise Analysis

# Components of Capital Structure - Software Industry under Large Cap

The company wise analysis of components of software industry under large cap group is presented below. The mean value of ESC are found to be range between ₹503.30 million (Mindtree) to ₹3421.25 million (Wipro). The overall mean value of ESC of large cap companies amounts to ₹1444.07 million. The ESC of TCS, Wipro and HCL are greater than the overall mean. The highest co-variance has been found in Mindtree at 103.58 which implies that the ESC is instable and it inferred that the company highly raised their equity share capital during the study period. The lowest co-variance has been found in NIIT (40.74) showing the stability of ESC.

The PSC of large cap companies in software industry showing that TCS only has raised PSC during the years from 2007-08 to 2012-13. The average of PSC is ₹400 million and it is above the overall mean. The co-efficient of variation in TCS (126.77) implies that the inconsistency of PSC.

The mean value of retained earnings of select large cap companies are found to be range between 680.93 million to 45612.36 million. The highest mean value is found in TCS and lowest is found in NIIT. The grand mean of retained earnings amounts to 18148.07 million. The retained earnings of TCS and Wipro are above the overall average. The Maximum co-variance has been found in HCL at 121.99 which implies that the low level of consistency in retained earnings and the least co-variance has been found in Wipro showing the sustainability of retained earnings.

The mean value of debentures are found to be range between ₹231.27 million (NIIT) to ₹36548.01 million (Wipro). The overall mean value of debentures of large cap companies amounts to ₹8681.95 million. The debentures of Wipro is greater than the overall mean. The maximum co-variance is found at 102.08 which denotes the volatility of debentures in HCL while the minimum variation is found in TCS with 62.55 showing the consistency level of debentures.

#### Components of Capital Structure - Software Industry under Mid Cap

The company wise analysis of components of software industry under mid cap group is presented below.

**Table 4.34: Components of Capital Structure - Company Wise Analysis - Software Industry** 

Company	Equity	y Share Ca	pital	Prefere	ence Shar	re Capital	Ret	ained Earn	ings	]	Debentures		
						Large Cap	)						
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	
TCS	1354.7	698.9	51.59	400.0	507.1	126.77	45612.4	46417.9	101.77	1607.1	1005.2	62.55	
Wipro	3421.3	1658.5	48.48	0.0	0.0	0.0	29792.1	19245.5	64.6	36548.0	27009.3	73.9	
HCL	1457.1	782.4	53.69	0.0	0.0	0.0	12988.8	15845.4	121.99	4455.0	4547.7	102.08	
NIIT	484.0	197.2	40.74	0.0	0.0	0.0	680.9	454.6	66.76	231.3	189.8	82.07	
Mindtree	503.3	521.3	103.58	0.0	0.0	0.0	1666.2	1231.9	73.94	568.4	390.1	68.63	
Grand mean		1444.07		80.00				18148.07			8681.95		
				Mid cap									
Zensar	329.8	106.8	32.38	0.0	0.0	0.0	673.5	506.9	75.27	73.3	62.1	84.72	
3I Infotech	3059.2	3351.1	109.54	1293.6	740.7	57.26	-1537.4	3256.7	-211.83	13663.3	8759.5	64.11	
Mastek	116.4	26.2	22.48	0.0	0.0	0.0	317.2	266.7	84.08	8.5	5.3	61.78	
Ramco	170.6	63.4	37.16	0.0	0.0	0.0	-78.9	252.7	-320.49	1607.6	943.1	58.67	
ICSA	82.1	19.4	23.58	0.0	0.0	0.0	-965.3	2846.1	-294.83	5676.1	4872.1	85.83	
Grand mean		751.61			258.72	•		-318.18			4205.76		
						Small cap	)						
FCS	761.6	686.0	90.07	0.0	0.0	0.0	80.4	112.2	139.44	69.4	63.7	91.83	
Onward	132.8	13.9	10.47	0.0	0.0	0.0	8.2	49.2	596.46	183.7	34.3	18.68	
Tricom	112.6	45.7	40.57	0.0	0.0	0.0	-18.9	162.6	-862.04	539.2	397.7	73.75	
Goldstone	163.0	36.7	22.54	0.0	0.0	0.0	6.3	50.6	800.58	103.2	40.3	39.02	
Mold-Tek	59.2	22.9	38.73	0.0	0.0	0.0	13.8	20.8	150.52	138.3	73.2	52.94	
Grand mean		245.83			0.00			17.99		206.77			

The mean value of ESC of select five companies are found to range between ₹82.13 million (ICSA) to ₹3059.15 million (3I info). The overall mean value of ESC of mid cap companies amounts to ₹751.61 million. The average ESC of 3I info is greater than the overall mean. The co-efficient of variation across the five companies shows that the level of ESC has remained highly stable in Mastek (22.48) while it is highly instable in 3I info (109.54) and it inferred that the company 3I info highly raised their owners capital during the study period.

The PSC of mid cap companies in software industry shows that the companies have not raised preference shares except one company (3I info) during the study period from 2002-03 to 2016-17. It indicates that the mid cap companies in software industry are highly dependent on other sources. The co-variance has been found at 57.26 showing the consistency level in 3I info.

The mean value of retained earnings of select mid cap companies are found to range between -₹1537.41 million to ₹673.45 million .The highest mean value is found in 3I info and lowest is found in Zensar. The average retained earnings of Zensar, Mastek and Ramco are greater than the overall mean. The highest co-variance has been found in mastek at 84.08 which implies that the high variability in retained earnings and the lowest co-variance has been found in Ramco showing the high level of consistency in retained earnings.

The mean value of debentures is found to be range between ₹8.53 million (Mastek) to ₹13663.26 million (3I info). The overall mean value of debentures of mid cap companies amounts to ₹4205.76 million. The debentures of 3I info and ICSA are greater than the overall mean. The maximum co-variance is found at 85.83 which denotes the volatility of debentures in ICSA. The minimum variation is found in Ramco with 58.67 showing the consistency level of debentures.

# Components of Capital Structure - Software Industry under Small Cap

The company wise analysis of components of software industry under small cap group is presented below.

The mean value of ESC is found to be range between ₹59.23 million (Moldtek) to ₹761.59 million (FCS). The overall mean value of ESC of small cap companies amounts to ₹245.83 million. The ESC of FCS is greater than the overall mean. The co-efficient of variation across the five companies shows that the level of ESC has remained highly stable in Gold stone (22.54), while it is highly instable in FCS (90.07).

The PSC of small cap companies in software industry shows that the companies have not raised preference share during the study period. It indicates that the small cap companies in software industry are highly dependent on the other sources.

The mean value of retained earnings of select companies is found to be range between -₹18.87 million to ₹80.43 million. The highest mean value is found in FCS and lowest is found in Tricom. The grand mean of retained earnings amounts to ₹17.99 million. The retained earnings of FCS is above the overall average. The highest co-variance has been found in Goldstone at 800.58 which implies that the retained earnings is instable and the lowest co-variance has been found in Tricom showing the stability of retained earnings.

The mean value of debentures are found to be range between ₹69.39 million (FCS) to ₹539.23 million (Tricom). The overall mean value of debentures of small cap companies amounts to ₹206.77 million. The debentures of Tricom is found to be greater than the overall mean. The maximum co-variance is found at 91.83 which denotes the volatility of debentures in FCS while the minimum variation is found in Onward with 18.68 showing the consistency of debentures.

#### 4.2.3.c ANALYSIS OF VARIANCE

#### **Equity Share Capital - Software Industry under Large Cap**

**Ho**: There is no significant mean difference of equity share capital among the select large cap companies of software industry.

Table 4.35 : ANOVA : Equity Share Capital - Software Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	8.59E+07	4	2.15E+07	25.789	**
Within Groups	5.83E+07	70	8.32E+05		
Total	1.44E+08	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 25.789 which is significant at one per cent level. It indicates that, the equity share capital vary significantly among the select large cap companies of software industry. Hence the null hypothesis is rejected.

# **Preference Share Capital - Software Industry under Large Cap**

**Ho**: There is no significant mean difference of preference share capital among the select large cap companies of software industry.

Table 4.36 : ANOVA : Preference Share Capital - Software Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.92E+06	4	4.80E+05	9.333	**
Within Groups	3.60E+06	70	5.14E+04		
Total	5.52E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 9.333 which is significant at one per cent level. It indicates that, the preference share capital vary significantly among the select large cap companies of software industry. Hence the null hypothesis is rejected.

# Retained Earnings- Software Industry under Large Cap

**Ho**: There is no significant mean difference of retained earnings among the select large cap companies of software industry.

Table 4.37 : ANOVA : Retained Earnings- Software Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	2.24E+10	4	5.60E+09	10.079	**
Within Groups	3.89E+10	70	5.56E+08		
Total	6.13E+10	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 10.079 which is significant at one per cent level. It means that, the retained earnings vary significantly among the select large cap companies of software industry. Hence the null hypothesis is rejected.

#### **Debentures - Software Industry under Large Cap**

**Ho**: There is no significant mean difference of debentures among the select large cap companies of software industry.

Table 4.38 : ANOVA : Debentures - Software Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.47E+10	4	3.68E+09	24.496	**
Within Groups	1.05E+10	70	1.50E+08		
Total	2.52E+10	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F-ratio 'between companies' is 24.496 which is significant at one per cent level. This shows that the debentures vary significantly among the select large cap companies of software industry. Hence the null hypothesis is rejected.

From the above analysis, it is concluded that all the components of capital structure have significant mean difference among the large cap companies in software industry. It indicates that, all the components are highly influencing the capital structure of large cap companies in software industry.

# **Equity Share Capital - Software Industry under Mid Cap**

**Ho**: There is no significant mean difference of equity share capital among the select mid cap companies of software industry.

Table 4.39: ANOVA: Equity Share Capital - Software Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.00E+08	4	2.51E+07	11.157	**
Within Groups	1.57E+08	70	2.25E+06		
Total	2.58E+08	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 11.157 which is significant at one per cent level. It indicates that, the equity share capital vary significantly among the select mid cap companies of software industry. Hence the null hypothesis is rejected.

#### Preference Share Capital - Software Industry under Mid Cap

**Ho**: There is no significant mean difference of preference share capital among the select mid cap companies of software industry.

Table 4.40 : ANOVA : Preference Share Capital - Software Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	2.01E+07	4	5.02E+06	45.755	**
Within Groups	7.68E+06	70	1.10E+05		
Total	2.78E+07	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 45.755 which is significant at one per cent level. It indicates that, the preference share capital vary significantly among the select mid cap companies of software industry. Hence the null hypothesis is rejected.

# **Retained Earnings- Software Industry under Mid Cap**

**Ho**: There is no significant mean difference of retained earnings among the select mid cap companies of software industry.

Table 4.41 : ANOVA : Retained Earnings- Software Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	5.02E+07	4	1.26E+07	3.288	*
Within Groups	2.67E+08	70	3.82E+06		
Total	3.18E+08	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 3.288 which is significant at five per cent level. This shows that the retained earnings vary significantly among the select mid cap companies of software industry. Hence the null hypothesis is rejected.

# **Debentures - Software Industry under Mid Cap**

**Ho**: There is no significant mean difference of debentures among the select mid cap companies of software industry.

Table 4.42 : ANOVA Debentures - Software Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	2.00E+09	4	4.99E+08	24.612	**
Within Groups	1.42E+09	70	2.03E+07		
Total	3.41E+09	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F-ratio 'between companies' is 24.612 which is significant at one per cent level. It indicates that, the debentures vary significantly among the select mid cap companies of software industry. Hence the null hypothesis is rejected.

From the above analysis, it is concluded that all the components of capital structure have significant mean difference among the mid cap companies in software industry. It indicates that, all the components are plays a major role in the capital structure of mid cap companies in software industry.

#### **Equity Share Capital - Software Industry under Small Cap**

**Ho**: There is no significant mean difference of equity share capital among the select small cap companies of software industry.

Table 4.43 : ANOVA : Equity Share Capital - Software Industry (Small Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	5.07E+06	4	1.27E+06	13.36	**
Within Groups	6.65E+06	70	9.49E+04		
Total	1.17E+07	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 13.36 which is significant at one per cent level. This shows that the equity share capital vary significantly among the select small cap companies of software industry. Hence the null hypothesis is rejected.

# **Retained Earnings- Software Industry under Small Cap**

**Ho**: There is no significant mean difference of retained earnings among the select small cap companies of software industry.

**Table 4.44 : ANOVA : Retained Earnings- Software Industry (Small Cap)** 

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	8.26E+04	4	2.06E+04	2.323	NS
Within Groups	6.22E+05	70	8.89E+03		
Total	7.05E+05	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 2.323 which is found not to be significant. It indicates that, the retained earnings does not vary significantly among the select small cap companies of software industry. Hence the null hypothesis is accepted.

#### **Debentures - Software Industry under Small Cap**

**Ho**: There is no significant mean difference of debentures among the select small cap companies of software industry.

**Table 4.45 : ANOVA Debentures - Software Industry (Small Cap)** 

	Sum of Squares	Df	Mean Square	F	Sig
<b>Between Groups</b>	2.18E+06	4	5.45E+05	15.995	**
Within Groups	2.39E+06	70	3.41E+04		
Total	4.57E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F-ratio 'between companies' is 15.995 which is significant at one per cent level. It indicates that, the debentures vary significantly among the select small cap companies of software industry. Hence the null hypothesis is rejected.

From the above analysis, it is concluded that equity share capital and debentures have significant mean difference among the small cap companies in software industry. It indicates that these components are highly influencing the capital structure of small cap companies in software industry.

#### **4.2.4 Transport Industry**

#### 4.2.4.a Year Wise Analysis

#### Components of Capital Structure - Transport Industry under Large Cap

Table 4.46 reveals the year wise analysis of components of large cap companies in transport industry for the period from 2002-03 to 2016-17. The Mean value of ESC has been found to be highest in the year 2009-10 with ₹3234.12 million and the lowest mean value is found in the year 2003-04 with ₹ 1829.50 million. The mean value of ESC shows a fluctuating trend throughout the study period. The overall average of ESC is 2603.75 million. The average ESC in the years from 2008-09 to 2016-17 are greater than the mean value in the years from

2002-03 to 2007-08. The highest co-variance has been found in the year 2016-17 at 94.02 which implies that the high variability and the lowest co-variance has been found in the year 2015-16 showing the high level of consistency in ESC.

The Mean value of PSC has been found to be highest in the year 2016-17 and the lowest mean remained constant at ₹ 5.62 million during the period from 2004-05 to 2014-15. The overall average of PSC is 90.24 million. The co-efficient of variation is found that the PSC has remained stable during the years 2003, 2016 and 2017. Volatility is found to be high during the year from 2004-05 to 2014-15.

The mean value of retained earnings ranges between ₹ 781.78 million and ₹ 7684.30 million. The highest mean value is found in the year 2016-17 and lowest value is found in the year 2002-03. The average of retained earnings shows fluctuating trend throughout the study period. The overall average of retained earnings is ₹ 3529.91 million. High level of consistency is found in the year 2009-10 whereas consistency is found in the year 2011-12

Average of debentures has been found to be highest in the year 2016-17 with ₹ 61485.98 million and the lowest has been found in the year 2002-03 with ₹ 6581.24 million. The mean value of debentures shows increasing trend during most of the study period. The overall average of debentures is ₹27531.69 million and the average debentures in the years from 2011-12 to 2016-17 are greater than the overall mean. The co-efficient of variation is found that the debentures has remained stable during the year 2008-09 with 52.32 whereas the volatility is found to be high during the year 2016-17 with 135.12.

Thus the components of capital structure of large cap companies in transport industry indicates that, all the components are showing increasing trend throughout the study period. It concludes that the debentures plays a major role in capital structure of large cap companies in transport industry.

Table 4.46 : Components of Capital Structure - Year Wise Analysis - Transport Industry (Large Cap)

year	Equit	y Share C	apital	Pre	ference Sl Capital	nare	Reta	nined Earni	ngs	Debentures		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	1829.7	1216.2	66.47	150.0	335.4	223.61	781.8	820.9	105.01	6581.2	4632.3	70.39
2003-2004	1829.5	1215.9	66.46	155.6	332.5	213.66	1092.9	1309.1	119.78	8952.0	6012.2	67.16
2004-2005	1848.5	1180.5	63.86	5.6	12.6	223.67	4363.1	4846.7	111.08	10657.3	7675.1	72.02
2005-2006	2118.1	1524.1	71.96	5.6	12.6	223.67	3321.1	3500.0	105.39	11759.2	6917.3	58.82
2006-2007	2482.7	1632.2	65.74	5.6	12.6	223.67	3481.1	3352.8	96.31	11784.1	7799.6	66.19
2007-2008	2563.2	1709.4	66.69	5.6	12.6	223.67	4129.8	4191.7	101.50	15166.3	9164.6	60.43
2008-2009	3228.9	2352.2	72.85	5.6	12.6	223.67	4791.1	4778.7	99.74	20941.7	10956.2	52.32
2009-2010	3234.1	2343.9	72.47	5.6	12.6	223.67	2198.1	1921.8	87.43	25571.3	14117.0	55.21
2010-2011	2910.7	1912.3	65.70	5.6	12.6	223.67	2598.1	3188.8	122.74	24059.1	18927.4	78.67
2011-2012	2910.7	1912.2	65.70	5.6	12.6	223.67	1230.7	5086.3	413.29	35342.9	28076.1	79.44
2012-2013	2943.9	1943.6	66.02	5.6	12.6	223.67	2921.0	6908.6	236.52	42449.0	38681.7	91.13
2013-2014	2967.4	1965.8	66.25	5.6	12.6	223.67	3065.0	8263.6	269.61	42316.4	41602.6	98.31
2014-2015	2967.4	1965.8	66.25	5.6	12.6	223.67	4617.1	8125.0	175.98	44502.9	48922.4	109.93
2015-2016	3018.9	1881.0	62.31	486.1	1087.0	223.61	6673.5	10335.8	154.88	51406.2	64932.7	126.31
2016-2017	2202.6	2070.9	94.02	500.0	1118.0	223.61	7684.3	13214.8	171.97	61486.0	83079.8	135.12
Grand mean		2603.75			90.24		3529.91			27531.69		

# Components of Capital Structure - Transport Industry under Mid Cap

Table 4.47 depicts the year wise analysis of components of mid cap companies in transport industry for the period from 2002-03 to 2016-17. The highest mean value of ESC has been found in the year 2016-17 with ₹639.66 million and the lowest mean value is found in the year 2002-03 with ₹ 360.02 million. The overall average of ESC stood at ₹550.48 million. The average ESC in the years from 2008-09 to 2016-17 are greater than the mean value in the years from 2002-03 to 2007-08. The co-efficient of variation is found that the ESC has remained stable during the year 2016-17. Volatility is found to be high during the year 2006-07.

The PSC of mid cap companies in transport industry shows that the companies have not raised preference share except one company during the study period from 2002-03 to 2016-17. It indicates that the mid cap companies in transport industry are highly dependent on the other sources. The overall average of PSC is ₹16 million. The co-variance has been found to be constant throughout the study period with 223.61.

The Mean value of retained earnings has been found to be highest in the year 2005-06 with ₹509.38 million and the lowest mean value is found in the year 2012-13with ₹-282.84 million. The overall mean of retained earnings is 180.35 million. The highest co-variance has been found in the year 2011-12 which implies that the inconsistency level of retained earnings. The least co-variance has been found in the year 2010-11 showing the stability of retained earnings.

Average of debentures has been found to be highest in the year 2008-09 with ₹5352.94 million and the lowest has been found in the year 2002-03 with ₹1880.48 million. The mean value of debentures shows flugguating trend throughout the study years. The overall average of debentures is ₹3821.15 million. High level of consistency is found in the year 2004-05 with 80.89 and low level of consistency is found in the year 2011-12 with 132.97.

Thus the components of capital structure of mid cap companies under transport industry shows that the increasing trend in equity share capital whereas retained earnings and debentures shows a fluctuating trend throughout the study period. It concludes that mid cap companies in transport industry highly depend on debentures.

Table 4.47 : Components of Capital Structure - Year Wise Analysis - Transport Industry (Mid Cap)

year	Equit	y Share C	apital	Pr	eference S Capital		Ret	tained Earı	nings	Debentures		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	360.0	490.5	136.23	0.0	0.0	0.0	-27.4	145.5	-531.29	1880.5	2116.8	112.57
2003-2004	361.1	489.7	135.62	0.0	0.0	0.0	89.6	242.3	270.52	1919.9	1832.4	95.44
2004-2005	363.7	487.7	134.09	80.0	178.9	223.61	390.5	687.0	175.94	2854.6	2309.2	80.89
2005-2006	520.0	720.5	138.57	80.0	178.9	223.61	509.4	630.1	123.69	4183.7	5391.6	128.87
2006-2007	532.2	745.9	140.16	80.0	178.9	223.61	249.0	139.5	56.00	4615.1	5440.4	117.88
2007-2008	572.1	726.3	126.96	0.0	0.0	0.0	480.6	472.6	98.33	3849.8	3624.7	94.15
2008-2009	565.5	730.7	129.22	0.0	0.0	0.0	421.1	721.8	171.39	5352.9	5349.0	99.93
2009-2010	570.2	727.6	127.59	0.0	0.0	0.0	184.5	119.2	64.64	5161.1	5581.2	108.14
2010-2011	601.6	709.7	117.96	0.0	0.0	0.0	-91.4	505.9	-553.37	4559.9	5187.8	113.77
2011-2012	634.0	701.4	110.63	0.0	0.0	0.0	23.4	699.9	2990.81	3599.0	4785.6	132.97
2012-2013	634.0	701.4	110.63	0.0	0.0	0.0	-282.8	1058.8	-374.35	3052.9	2831.7	92.75
2013-2014	634.3	701.2	110.55	0.0	0.0	0.0	61.3	66.4	108.37	3482.3	3292.9	94.56
2014-2015	634.4	701.1	110.52	0.0	0.0	0.0	361.0	298.5	82.67	3657.0	3617.7	98.92
2015-2016	634.5	701.0	110.49	0.0	0.0	0.0	238.7	113.5	47.54	4179.5	4059.9	97.14
2016-2017	639.7	697.5	109.04	0.0	0.0	0.0	97.9	379.0	387.29	4969.1	4483.8	90.23
Grand mean		550.48			16.00		180.35			3821.15		

#### Components of Capital Structure - Transport Industry under Small Cap

Table 4.48 depicts the year wise analysis of components of small cap companies in transport industry for the period from 2002-03 to 2016-17. The highest mean value of ESC has been found to be constant in the years 2015-16 and 2016-17 with ₹123.10 million and the lowest mean value is found in the year 2002-03 with ₹ 90.48 million. The mean value of ESC shows an increasing trend throughout the study period. The overall average of ESC stood at ₹111.36 million. The average ESC in the years from 2008-09 to 2016-2017 are greater than the mean value from 2002-03 to 2007-08. High level of consistency is found in the years 2016 and 2017 and the low level of consistency is found in the year 2005-06.

The PSC of small cap companies in transport industry shows that the companies have not raised preference share except one company during the study period from 2002-03 to 2016-17. It indicates that the small cap companies in transport industry are highly depend on other sources. The overall average of PSC is ₹13.84 million. The co-variance has been found to be constant in the years from 2003-04 to 2010-11 with 223.61 showing low level of consistency.

The Mean value of retained earnings has been found to be highest in the year 2007-08 with ₹141.66 million and the lowest mean value is found in the year 2013-14 with ₹-64.10 million. The overall average of retained earnings is ₹49.04 million. The mean value of retained earnings showing a fluctuating trend throughout the study period. The highest co-variance has been found in the year 2014-15 at 265.20 which implies that the high level of variability in retained earnings. The lowest co-variance has been found in the year 2016-17 showing the consistency level of retained earnings.

Average of debentures has been found highest in the year 2008-09 with ₹1325.20 million and the lowest has found in the year 2003-04 with ₹237.28 million. The mean value of debentures shows fluctuating trend throughout the study period. The overall average of debenture is ₹846.64 million and the average debentures in the years from 2006-07 to 2016-17 are greater than the overall mean. The co-efficient of variation is found that the debentures has remained stable during the year 2015-16. Volatility is found to be high during the year 2008-09.

Thus the components of capital structure of small cap companies under transport industry shows that the increasing trend of equity share capital whereas retained earnings and debentures shows a fluctuating trend throughout the study period.

Table 4.48 : Components of Capital Structure - Year Wise Analysis - Transport Industry (Small Cap)

year	Equity	Share Ca	apital	Pre	ference Sh Capital	are	Reta	nined Earı	nings	Debentures		
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
2002-2003	90.5	70.2	77.55	27.4	57.4	209.62	20.4	40.1	196.57	308.2	317.4	103.00
2003-2004	90.5	70.1	77.44	26.0	58.1	223.61	29.8	44.9	150.83	237.3	237.9	100.25
2004-2005	90.5	70.1	77.44	26.0	58.1	223.61	77.8	128.3	164.90	239.8	208.6	86.98
2005-2006	95.3	78.1	81.97	26.0	58.1	223.61	103.5	111.6	107.79	359.9	338.0	93.91
2006-2007	109.0	79.6	73.00	26.0	58.1	223.61	67.7	92.0	135.74	869.6	950.5	109.30
2007-2008	113.4	80.6	71.11	26.0	58.1	223.61	141.7	248.4	175.32	1235.9	1427.1	115.47
2008-2009	113.4	80.6	71.05	18.2	40.7	223.61	54.9	59.4	108.22	1325.2	2019.5	152.39
2009-2010	113.3	80.7	71.26	16.0	35.8	223.61	-9.1	114.8	-1259.20	1033.5	1401.9	135.64
2010-2011	121.5	73.6	60.62	16.0	35.8	223.61	46.9	29.0	61.85	1031.0	1209.5	117.32
2011-2012	121.7	73.8	60.60	0.0	0.0	0.0	39.5	23.7	59.90	980.5	992.8	101.26
2012-2013	121.7	73.8	60.60	0.0	0.0	0.0	29.9	63.6	212.60	1053.1	871.9	82.79
2013-2014	121.7	73.8	60.60	0.0	0.0	0.0	-64.1	87.1	-135.93	1011.9	845.7	83.58
2014-2015	121.7	73.8	60.60	0.0	0.0	0.0	87.4	231.7	265.20	941.1	773.1	82.15
2015-2016	123.1	74.5	60.54	0.0	0.0	0.0	114.1	191.6	167.91	1028.3	747.9	72.73
2016-2017	123.1	74.5	60.54	0.0	0.0	0.0	-4.7	135.1	-2873.66	1044.2	835.3	79.99
Grand mean		111.36		13.84			49.04			846.64		

# 4.2.4.b Company Wise Analysis

# **Components of Capital Structure - Transport Industry under Large Cap**

The company wise analysis of components of transport industry under large cap group is presented below. The mean value of ESC of select five companies are found to be range between ₹229.66 million (Allcargo) to ₹3979.23 million (Essar). The overall mean value of ESC of large companies amounts to ₹2603.75 million. The ESC of Adani, Shipping corp and Essar are greater than the overall mean. The co-efficient of variation across the five companies shows that the level of ESC has remained highly stable in Great eastern (10.02), while it is highly instable in Allcargo (60.39).

The mean value of PSC is found to be range between ₹100 million (Great eastern) to ₹351.18 million (Adani). Shipping corp, Essar and Allcargo has not raised preference share throughout the study period. The overall mean of PSC amounts to ₹90.24 million and the average PSC of Adani and Great eastern are above the overall average. The highest co-variance has been found in Great eastern at 263.90 which implies the inconsistency level of PSC.

The mean value of retained earnings is found to be range between ₹579.99 million and ₹9161.06 million. The highest mean value is found in Adani and lowest is found in Essar. The grand mean of retained earnings amounts to ₹3529.91 million. The retained earnings of Adani and Great eastern are above the overall average. The highest co-variance has been found in Essar at 217.70 which implies that the retained earnings is instable and the lowest co-variance has been found in Allcargo showing the sustainability of retained earnings.

The mean value of debentures is found to be range between ₹1960.58 million (Allcargo) to ₹57875.71 million (Adani). The overall mean value of debentures of large companies amounts to ₹27531.69 million. The debentures of Adani, Great eastern and Shipping corp are greater than the overall mean. The maximum co-variance is found at 106.14 which denotes the volatility of debentures in Adani. The minimum variation is found in Great eastern with 33.34 showing the consistency level of debentures.

# Components of Capital Structure - Transport Industry under Mid Cap

The company wise analysis of components of transport industry under mid cap group is presented below.

 Table 4.49 : Components of Capital Structure - Company Wise Analysis - Transport Industry

Company	Equity	y Share Ca	pital	Prefer	ence Shar	e Capital	Ret	ained Earn	ings	]	Debentures	
						Large Ca <sub>l</sub>	p					
	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV	Mean	SD	CV
Adani Ports	3347.4	1163.7	34.76	351.2	858.4	244.44	9161.1	9977.8	108.91	57875.7	61427.1	106.14
Great Eastern	1594.9	159.7	10.02	100.0	263.9	263.9	4096.5	3827.9	93.44	28551.2	9518.3	33.34
Shipping corp	3867.5	894.0	23.12	0.0	0.0	0.0	3202.9	4414.6	137.83	39177.2	26975.6	68.86
Essar Ports	3979.2	1390.5	34.95	0.0	0.0	0.0	580.0	1262.6	217.7	10093.8	8225.1	81.49
Allcargo	229.7	138.7	60.39	0.0	0.0	0.0	609.2	419.3	68.84	1960.6	1901.9	97.01
Grand mean		2603.75			90.24			3529.91			27531.69	
					Mid cap				•			
Mercator	200.8	74.5	37.12	80.0	165.6	207.02	214.8	1092.6	508.64	9629.9	4474.8	46.47
Aegis	246.9	85.0	34.43	0.0	0.0	0.0	236.4	197.6	83.57	789.7	585.5	74.14
Gati	151.1	36.5	24.13	0.0	0.0	0.0	144.2	161.6	112.1	2297.5	1445.4	62.91
Noida Toll	1730.5	262.6	15.17	0.0	0.0	0.0	87.2	236.3	270.89	1734.6	1215.1	70.05
Sical	423.1	120.7	28.54	0.0	0.0	0.0	219.1	161.1	73.53	4654.2	1747.6	37.55
Grand mean		550.48			16.00			180.35			3821.15	
						Small cap	)					
Shreyas	215.3	8.9	4.12	68.7	60.7	88.34	124.0	192.3	155.1	991.8	572.2	57.69
Starlog	120.2	5.7	4.73	0.5	1.8	387.3	34.3	186.3	543.03	2247.1	1213.4	54
Chartered	71.3	27.2	38.07	0.0	0.0	0.0	25.0	43.7	174.96	453.0	353.1	77.94
Patel Integrated	131.9	33.3	25.28	0.0	0.0	0.0	28.6	26.6	92.76	370.3	156.2	42.19
Sanco Trans	18.0	0.0	0.0	0.0	0.0	0.0	33.3	31.6	94.71	171.0	100.7	58.85
Grand mean		111.36			13.84		49.04			846.64		

The mean value of ESC of select five companies is found to be range between ₹151.10 million (Gate) to ₹1730.54 million (Noida). The overall mean value of ESC of mid cap companies amounts to ₹550.48 million. The average ESC of Noida toll is greater than the overall mean. The co-efficient of variation across the five companies shows that the level of ESC has remained highly stable in Noida toll (15.17), while it is highly instable in Mercator (37.12).

The PSC of mid cap companies in transport industry shows that the companies have not raised preference share except Mercator during the study period from 2002-03 to 2016-17. It indicates that the mid cap companies in transport industry are highly depend on the other sources. The co-variance has been found at 207.02 showing the inconsistency level in PSC.

The mean value of retained earnings of select companies are found to range between ₹87.24 million to ₹236.39 million. The highest mean value is found in Aegis and lowest is found in Noida. The overall mean value of retained earnings stood at ₹180.35 million. The average retained earnings of Mercator, Aegis and Sical are greater than the overall mean. The highest co-variance has been found in Mercator at 508.64 which implies that the variability in retained earnings and the lowest co-variance has been found in Sical showing the consistency level of retained earnings.

The mean value of debentures is found to be range between ₹789.69 million (Aegis) to ₹9629.86 million (Mercator). The overall mean value of debentures of mid cap companies amounts to ₹3821.15 million. The average debentures of Mercator and Sical are greater than the overall mean. The maximum co-variance found at 74.14 which denotes the volatility of debentures in Aeigs during the study period. The minimum co-variance found in Sical with 37.55 showing the consistency level of debentures.

# Components of Capital Structure - Transport Industry under Small Cap

The company wise analysis of components of transport industry under small cap group is presented below. The mean value of ESC of select five companies is found to be range between ₹18 million (Sanco) to ₹215.32 million (Shreyas). The overall mean value of ESC of small cap companies amounts to ₹111.36 million. The ESC of Shreyas, Starlog and Patel are found to be greater than the overall mean. The co-efficient of variation across the five companies shows that the level of ESC has remained highly stable with Sanco, while it is highly instable with Chartered and it inferred that the company highly raised their equity share capital during the study period.

The PSC of small cap companies in transport industry shows that the companies have not raised preference share except Shreyas during the study period from 2002-03 to 2016-17. It indicates that the small cap companies in transport industry are highly dependent on the other sources. The co-variance of PSC has been found at 88.34 showing the inconsistency level in Shreyas.

The mean value of retained earnings of select companies is found to be range between ₹24.97 million to ₹123.96 million. The highest mean value is found in Shreyas and lowest is found in Chartered. The grand mean of retained earnings amounts to ₹49.04 million. The retained earnings of Shreyas is above the overall average. The highest co-variance has been found in Starlog at 543.03 which implies that the low level of consistency in retained earnings and the lowest co-variance has been found in Patel showing the stability in retained earnings.

The mean value of debentures are found to range between ₹171.03 million (Sanco) to ₹2247.14 million (Starlog). The overall mean value of debentures of small cap companies amounts to ₹846.64 million. The debentures of Shreyas and Starlog are found to be greater than the overall mean. The maximum co-variance of debentures is found at 77.94 which denotes the volatility of debentures in Chartered. The minimum variation is found in Patel with 42.19 showing the high level of consistency in debentures.

#### 4.2.4.c ANALYSIS OF VARIANCE

#### **Equity Share Capital - Transport Industry under Large Cap**

**Ho**: There is no significant mean difference of equity share capital among the select large cap companies of transport industry.

Table 4.50 : ANOVA : Equity Share Capital - Transport Industry (Large Cap)

	Sum of Squares	Df	Mean Square	F	Sig
<b>Between Groups</b>	1.60E+08	4	4.01E+07	48.538	**
Within Groups	5.78E+07	70	8.26E+05		
Total	2.18E+08	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 48.538 which is significant at one per cent level. It means that, the equity share capital vary significantly among the select large cap companies of transport industry. Hence the null hypothesis is rejected.

# Preference Share Capital - Transport Industry under Large Cap

**Ho**: There is no significant mean difference of preference share capital among the select large cap companies of transport industry.

Table 4.51 : ANOVA : Preference Share Capital - Transport Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	5.84E+05	4	1.46E+05	1.534	NS
Within Groups	6.66E+06	70	9.52E+04		
Total	7.25E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 1.534 which is found not to be significant. It indicates that, the preference share capital does not vary significantly among the select large cap companies of transport industry. Hence the null hypothesis is accepted.

# Retained Earnings- Transport Industry under Large Cap

**Ho**: There is no significant mean difference of retained earnings among the select large cap companies of transport industry.

**Table 4.52 : ANOVA : Retained Earnings- Transport Industry (Large Cap)** 

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	7.41E+08	4	1.85E+08	6.833	**
Within Groups	1.90E+09	70	2.71E+07		
Total	2.64E+09	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 6.833 which is significant at one per cent level. It indicates that, the retained earnings vary significantly among the select large cap companies of transport industry. Hence the null hypothesis is rejected.

# **Debentures - Transport Industry under Large Cap**

**Ho**: There is no significant mean difference of debentures among the select large cap companies of transport industry.

Table 4.53 : ANOVA : Debentures - Transport Industry (Large Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	3.02E+10	4	7.56E+09	8.104	**
Within Groups	6.53E+10	70	9.33E+08		
Total	9.55E+10	74			

**Source**: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 8.104 which is significant at one per cent level. It indicates that, the debentures vary significantly among the select large cap companies of transport industry. Hence the null hypothesis is rejected.

From the above analysis, it is concluded that equity share capital, retained earnings and debentures have significant mean difference among the large cap companies in transport industry. It indicates that these components are highly influencing the capital structure of large cap companies in transport industry.

# **Equity Share Capital - Transport Industry under Mid Cap**

**Ho**: There is no significant mean difference of equity share capital among the select mid cap companies of transport industry.

Table 4.54 : ANOVA : Equity Share Capital - Transport Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	2.67E+07	4	6.69E+06	342.356	**
Within Groups	1.37E+06	70	1.95E+04		
Total	2.81E+07	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 342.356 which is significant at one per cent level. It indicates that, the equity share capital vary significantly among the select mid cap companies of transport industry. Hence the null hypothesis is rejected.

#### Preference Share Capital - Transport Industry under Mid Cap

**Ho**: There is no significant mean difference of preference share capital among the select mid cap companies of transport industry.

Table 4.55 : ANOVA : Preference Share Capital - Transport Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	7.68E+04	4	1.92E+04	3.50	*
Within Groups	3.84E+05	70	5.49E+03		
Total	4.61E+05	74			

**Source**: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 3.50 which is significant at five per cent level. It means that, the preference share capital vary significantly among the select mid cap companies of transport industry. Hence the null hypothesis is rejected.

# **Retained Earnings- Transport Industry under Mid Cap**

**Ho**: There is no significant mean difference of retained earnings among the select mid cap companies of transport industry.

**Table 4.56: ANOVA: Retained Earnings- Transport Industry (Mid Cap)** 

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	2.37E+05	4	5.93E+04	0.221	NS
Within Groups	1.88E+07	70	2.68E+05		
Total	1.90E+07	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 0.221 which is found not to be significant. It means that, the retained earnings does not vary significantly among the select mid cap companies of transport industry. Hence the null hypothesis is accepted.

# **Debentures - Transport Industry under Mid Cap**

**Ho**: There is no significant mean difference of debentures among the select mid cap companies of transport industry.

Table 4.57 : ANOVA : Debentures - Transport Industry (Mid Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	7.55E+08	4	1.89E+08	34.947	**
Within Groups	3.78E+08	70	5.40E+06		
Total	1.13E+09	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F-ratio 'between companies' is 34.947 which is significant at one per cent level. It indicates that, the debentures vary significantly among the select mid cap companies of transport industry. Hence the null hypothesis is rejected.

From the above, it is concluded that equity share capital, preference share capital and debentures have significant mean difference among the mid cap companies in transport industry. It indicates that these components are plays a major role in the capital structure of mid cap companies in transport industry.

# **Equity Share Capital - Transport Industry under Small Cap**

**Ho**: There is no significant mean difference of equity share capital among the select small cap companies of transport industry.

**Table 4.58: ANOVA: Equity Share Capital - Transport Industry (Small Cap)** 

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	3.24E+05	4	8.11E+04	206.858	**
Within Groups	2.74E+04	70	3.92E+02		
Total	3.52E+05	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 206.858 which is significant at one per cent level. It indicates that, the equity share capital vary significantly among the select small cap companies of transport industry. Hence the null hypothesis is rejected.

#### Preference Share Capital - Transport Industry under Small Cap

**Ho**: There is no significant mean difference of preference share capital among the select small cap companies of transport industry.

**Table 4.59 : ANOVA : Preference Share Capital - Transport Industry (Small Cap)** 

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	5.65E+04	4	1.41E+04	19.139	**
Within Groups	5.17E+04	70	7.38E+02		
Total	1.08E+05	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 19.139 which is significant at one per cent level. It indicates that, the preference share capital vary significantly among the select small cap companies of transport industry. Hence the null hypothesis is rejected.

# **Retained Earnings- Transport Industry under Small Cap**

**Ho**: There is no significant mean difference of retained earnings among the select small cap companies of transport industry.

**Table 4.60 : ANOVA : Retained Earnings- Transport Industry (Small Cap)** 

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	1.06E+05	4	2.65E+04	1.761	NS
Within Groups	1.05E+06	70	1.51E+04		
Total	1.16E+06	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F- ratio 'between companies' is 1.761 which is found not to be significant. It means that, the retained earnings does not vary significantly among the select small cap companies of transport industry. Hence the null hypothesis is accepted.

# **Debentures - Transport Industry under Small Cap**

**Ho**: There is no significant mean difference of debentures among the select small cap companies of transport industry.

Table 4.61 : ANOVA : Debentures - Transport Industry (Small Cap)

	Sum of Squares	df	Mean Square	F	Sig
<b>Between Groups</b>	4.23E+07	4	1.06E+07	26.998	**
Within Groups	2.74E+07	70	3.92E+05		
Total	6.97E+07	74			

Source: Computed \*- Significant at five per cent \*\* - Significant at one per cent NS - Not Significant

The above table shows that the computed F-ratio 'between companies' is 26.998 which is significant at one per cent level. It means that, the debentures vary significantly among the select small cap companies of transport industry. Hence the null hypothesis is rejected.

From the above analysis it concludes that equity share capital, preference share capital and debentures have significant mean difference among the small cap companies in transport industry. It indicates that these components are plays a predominant role in the capital structure of small cap companies in transport industry.

#### 4.3 CONCLUSION

From the analysis it is clear that predominance of debentures as a major source of finance in select service industries. In large cap companies ESC, PSC and debentures plays a vital role in capital structure where as in mid cap companies debentures are considered to be the major source of finance followed by ESC. In small cap companies both ESC and debentures are main source in capital structure. It could be concluded that there is a heavy dependence on the debentures of industries leads to increase the financial risk. Hence by increasing the profitability industries can avoid the financial risk.