



## FINANCIALS ANALYSIS OF PRIVATE SECTOR COMPANIES WITH GOVERNMENT OWNED COMPANY

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**Abstract:** - The aim of the study is to reveal the financial performance of Indian private sector companies with government owned company. The study analysis of tested whether the financials of private sector and government owned company are managed as par the rules or is there any lagging behind because of red-tapism and efficiency in the government owned Cement Company. Comparison of working capital, comparison of ratio analysis of private companies with government owned companies.

**Key words:** Private Sector Companies, Government Owned Company, T Test, Ratio Analysis, ANOVA, Means, Financial Performance.

**Introduction:** The Researcher is interested in testing whether the financials of private sector and government owned company are managed as par the rules or is there any lagging behind because of red-tapism and efficiency in the government owned Cement Company.

**Comparison of Working Capital of Private Companies With Government Owned Company:** It is proposed to examine whether the working capital on the average differ

significantly over the years between the private cement companies put together and the government owned company namely the APCEMT For this purpose, the working capital values for all the four private companies put together over the 10 years are taken and the value of the working capital for APCEMT. The null hypothesis to be tested is:

Ho: There is no significant difference between the average working capital of the two sectors

To test Ho, Students't test for equality of means is carried out. The results are given in the Tables 1.1 and 1.2.

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**Table 1.1: Group Statistics – Students't test**

ANOVA Code	N	Mean	Std Deviation	Std. Error Mean
1.00	40	116.1680	34.10880	5.39308
2.00	10	113.1550	36.77368	1.62886

From the Tables 1.1 it is observed that the 't' statistic value is  $t = 0.246$  with a corresponding p value  $p = 0.807$ .

Since P is greater than 0.05, the null hypothesis  $H_0$  is accepted. Hence, it can be concluded that the average working capital do not differ significantly between the private sector companies and the government owned Cement Company. Whether government owned or the company is in the private sector, working capital is the lubricating oil without which no company can function. It is evident from the above analysis that the average working capital does not differ significantly between private and government owned cement companies and reiterates the stand that the working capital aspect is well managed in APCEMT irrespective of their profitability or illiquidity.

#### **Comparison of Ratios of Private Companies with Government Owned Company**

Another interesting aspect of study is to have a comparison of private sector companies with that of the government owned company, namely APCEMT that is run by the Government of Andhra Pradesh. The parameters or indices which indicate the nature of functioning of the factory together with its financial strength and achievements are taken to be as following ratio are using.

- i. Overall profitability ratio
- ii. Earning to shareholders
- iii. Interest cover
- iv. Liquidity ratio
- v. Debt to equity ratio
- vi. Net profit compared to sales

These six characteristics can be compared individually between any two companies. But

the overall functioning and health of the company can be indicated as a vector comprising of the six components defined above. It gives a structure with six dimensional spaces. To have the overall comparison of all the six components put together between two companies, the multivariate approach is appropriate.

It is proposed to compare each one of the private companies individually with that of government run cement company – APCEMT.

It may be observed that two samples from two populations respectively are to be tested for equality of means of the characteristics chosen then Students't' test for equality of means is used. The multivariate analog of this is the Hotellings  $T^2$  test which is used to examine the equality of the mean vectors of the two populations with respect to a set of chosen characteristics of interest. In our study, the chosen characteristics are overall profitability (X1), Earning to shareholders (X2), Interest cover (X3), Liquidity ratio (X4), Debt to equity (X5) & Net profit to sales (X6) for the cement companies. The two populations or groups represent the private sector and the government owned cement companies.

For this purpose Hotelling  $T^2$  Test for Equality of mean vectors is used.

The null hypothesis to be tested is:

$H_0$ : The mean vectors of the six components do not differ significantly between the individual private companies and the government company.

The results are given in the following tables together with the Interpretations which could be drawn. Given in Table 1.3 the combination of Madras Cements and APCEMT

TABLE 1.2: Madras Cements and APCEMT - Multivariate Tests

Effect		Value	F	Hypothesis	Error	Sig.
				df	df	
Intercept	Pillai's Trace	00.985	145.579a	6.000	13.000	.000
	Wilk's Lambda	00.015	145.579a	6.000	13.000	.000
	Hotelling's Trace	67.190	145.579a	6.000	13.000	.000
	Roy's Largest Root	67.190	145.579a	6.000	13.000	.000
ANOVA	Pillai's Trace	0.756	6.706a	6.000	13.00	.002
	Wilk's Lambda	0.244	6.706a	6.000	13.00	.002
	Hotelling's Trace	3.095	6.706a	6.000	13.00	.002
	Roy's Largest Root	3.095	6.706a	6.000	13.00	.002

a. Exact statistic

b. Design: Intercept + ANOVA

It is observed from the Table 1.3 that, the value of Hotelling's  $T^2$  statistic is 3.095 with a corresponding F statistic value 6.706. The significance value  $p = 0.002$ . Since p value is less than 0.05, it is concluded that the null hypothesis  $H_0$  is getting rejected. Hence, there is a significant difference between the mean vectors of the two companies, Madras Cements and APCEMT.

Since the mean vectors differ significantly between Madras cements & APCEMT, it is proposed to investigate further whether the

means differ significantly for each one of the variables taken for consideration namely

- overall profitability ratio
- Earning to shareholders
- Interest cover
- Liquidity ratio
- Debt to equity ratio
- Net profit compared to sales

For this purpose, the Students' t-test for the equality of means has been carried out. The results obtained for each one of the variables are tabulated in Table 1.3:

Table 1.3: Madras Cements Vs. APCEMT - Students't-test for Equality of Means

Variable	T' static	P	Significance
Overall Profitability	2.506818	0.027568	Significant
Earnings per Share	2.184691	0.056739	Not Significant
Interest Cover	2.463936	0.024041	Significant
Liquidity	-0.17204	0.865704	Not Significant
Debt to Equity	-1.32684	0.21406	Not Significant
Net Profit to Sales	4.46456	0.000341	Significant

Source: Computed Data.

It is observed from the Table 1.4 that the variables namely overall profitability, interest cover, net profit to sales differ significantly between the two companies namely Madras cements and APCEMT. But in the case of the

variables, Earnings per share, liquidity and debt to equity are not significantly different. The combination of India Cements and APCEMT is given in Table 1.4.

**Table 1.4: India Cements and APCEMT - Multivariate Tests**

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	00.950	40.823a	6.000	13.000	.000
	Wilk's Lambda	00.050	40.823a	6.000	13.000	.000
	Hotelling's Trace	18.841	40.823a	6.000	13.000	.000
	Roy's Largest Root	18.841	40.823a	6.000	13.000	.000
ANOVA	Pillai's Trace	0.593	3.153a	6.000	13.00	.039
	Wilk's Lambda	0.407	3.153a	6.000	13.00	.039
	Hotelling's Trace	1.455	3.153a	6.000	13.00	.039
	Roy's Largest Root	1.455	3.153a	6.000	13.00	.039

a. Exact statistic      b.Design: Intercept + ANOVA

In the Table 7.4, where India Cements and APCEMT are taken for comparison, shows that the value of Hotellings T<sup>2</sup> statistic is 1.455 with a corresponding F statistic F = 3.153. The significance value p = 0.039 which indicates that the null hypothesis Ho is getting rejected and hence it is concluded that the mean vectors of the six components differ significantly.

Since the mean vectors differ significantly between India Cements and APCEMT, it is proposed to investigate further whether the means differ significantly for each one of the variables taken for consideration namely

- i. overall profitability ratio
- ii. Earning to shareholders
- iii. Interest cover
- iv. Liquidity ratio
- v. Debt to equity ratio
- vi. Net profit compared to sales

For this purpose, the Students't-test for the equality of means has been carried out. The results obtained for each one of the variables are tabulated in Table 1.6.

It is observed from the Table 1.5 that the variable namely liquidity do not differ significantly between the two companies namely India Cements and APCEMT. But in the

case of the variables, overall profitability, Earnings per share, interest cover and debt to equity & net profit to sales are significantly different. The combination of APCEMT Cements and APCEMT are given in Table 1.6.

**Table 1.5: India Cements – APCEMT – Students't –test for Equality of Means**

Variable	t' static	P	Significance
Overall Profitability	1.164649	0.266792	Significant
Earnings per Share	1.097831	0.300780	Significant
Interest Cover	0.791296	0.439673	Significant
Liquidity	3.753763	0.003189	Not Significant
Debt to Equity	1.232734	0.243372	Significant
Net Profit to Sales	0.621920	0.543332	Significant

Source: Computed Data.

**Table 1.6: APCEMT Cements and APCEMT - Multivariate Test**

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	000.9991	227.275a	6.000	12.000	.000
	Wilk's Lambda	00.009	227.275a	6.000	12.000	.000
	Hotelling's Trace	113.637	227.275a	6.000	12.000	.000
	Roy's Largest Root	113.637	227.275a	6.000	12.000	.000
ANOVA	Pillai's Trace	0.891	16.265a	6.000	12.00	.000
	Wilk's Lambda	0.109	16.265a	6.000	12.00	.000
	<b>Hotelling's Trace</b>	<b>8.133</b>	<b>16.265a</b>	<b>6.000</b>	<b>12.00</b>	<b>.000</b>
	Roy's Largest Root	8.133	16.265a	6.000	12.00	.000

a. Exact statistic

Design: Intercept+ANOVA

The comparison of APCEMT Cements with APCEMT shows that the computed  $T^2$  statistic value is 8.133 with a corresponding F ratio value 16.265. The p value is 0.000. Hence, in this case also it may be concluded that there exists a significant difference between the mean vectors of the two companies. Hence, the performance on the whole differs significantly between the two companies.

Since the mean vectors differ significantly between APCEMT Cements and APCEMT, it is proposed to investigate further whether the

means differ significantly for each one of the variables taken for consideration namely

- overall profitability ratio
- Earning to shareholders
- Interest cover
- Liquidity ratio
- Debt to equity ratio
- Net profit compared to sales

For this purpose, the Students' t-test for the equality of means has been carried out. The results obtained for each one of the variables are tabulated in the Table 1.7

**Table 1.7: APCEMT Cements – APCEMT - Students' t-test for Equality of Means**

Variable	t' static	P	Significance
Overall Profitability	1.591965	0.139700	Not Significant
Earnings per Share	2.440507	0.032793	Significant
Interest Cover	2.988914	0.011297	Significant
Liquidity	6.065937	0.000016	Significant
Debt to Equity	-2.569899	0.030193	Significant
Net Profit to Sales	4.602647	0.000410	Significant

Source: Computed Data.

It is observed from the Table 1.7 that the variables namely earning per share, Interest cover and liquidity and debt to equity and net profit to sales differ significantly between the two companies namely APCEMT Cements and

APCEMT. But in the case of the variable, overall profitability does not significantly differ. The combination of Chettinad Cements and APCEMT is presented in Table 1.8

**Table 1.8: Chettinad Cements and APCEMT -Multivariate Tests**

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	00.977	91.425a	6.000	13.000	.000
	Wilk's Lambda	00.023	91.425a	6.000	13.000	.000
	Hotelling's Trace	42.196	91.425a	6.000	13.000	.000
	Roy's Largest Root	42.196	91.425a	6.000	13.000	.000
ANOVA	Pillai's Trace	0.511	2.263a	6.000	13.00	.102
	Wilk's Lambda	0.489	2.263a	6.000	13.00	.102
	<b>Hotelling's Trace</b>	<b>1.044</b>	<b>2.263a</b>	<b>6.000</b>	<b>13.00</b>	<b>.102</b>
	Roy's Largest Root	1.044	2.263a	6.000	13.00	.102

a. Exact statistic

b. Design: Intercept+ANOVA

The comparison of the mean vectors of Chettinad Cements with that of APCEMT has been carried out and the results are given in Table 1.8. From this table, it is observed that the value of Hotelling's  $T^2$  statistic is 1.044 with a corresponding values of F statistic and p as  $F = 2.263$  and  $p = 0.102$ . Since the value of p is  $> 0.05$ , it is concluded that there is no significant difference between the mean vectors. Hence, it can be concluded that there is no significant difference between the mean vectors. It is interesting to observe that in this case of mean vectors are equal, there by implying that the overall performance on these six aspects are the same as compared with the other companies.

Since the mean vectors do not differ significantly between Chettinad Cements and APCEMT, we are interested in investigating further whether the means do not differ significantly for each one of the variables taken for consideration namely

- overall profitability ratio
- Earning to shareholders
- Interest cover
- Liquidity ratio
- Debt to equity ratio
- Net profit compared to sales

For this purpose, the Students' t-test for the equality of means has been carried out. The results obtained for each one of the variables are tabulated in the Table 7.9

**Table 1.9: Chettinad Cements – APCEMT – Students' t-test of Equality Means**

Variable	t' static	P	Significance
Overall Profitability	1.613572	0.130620	Not Significant
Earnings per Share	2.072391	0.065023	Not Significant
Interest Cover	1.595302	0.130205	Not Significant
Liquidity	-0.351349	0.729406	Not Significant
Debt to Equity	-0.932983	0.370855	Not Significant
Net Profit to Sales	2.655491	0.016101	Significant

Source: Computed Data.

It is observed from the Table 1.9 that the variable namely net profit to sales differs significantly between the two companies namely Chettinad Cements and APCEMT. But in the case of the variables, overall profitability,

Earnings per share, interest cover, liquidity are not significantly different.

**Conclusion:** Based on the above analysis, while summing up, the Madras Cements, India Cements & APCEMT Cements' performance on

the six parameters chosen, differ significantly and are presented in Table 1.10

**Table 1.10: Comparison Chart of all Ratios**

Ratios	Madras Cements	India Cements	Chettinad Cements	APCEMT Cements
Overall Profitability			Not significant	Not significant
Earning per share	Not significant		Not significant	
Interest cover			Not significant	
Liquidity	Not significant	Not significant	Not significant	
Debt to Equity	Not significant		Not significant	
Net profit to sales				

On the other hand, the mean vectors of Chettinad Cements' performance are not significantly different that of APCEMT excepting the Net profit ratio. It can be concluded that Chettinad Cements adopt the same strategies as that of APCEMT for its operation for the six parameters during the study period.

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