



## ANALYSIS OFFINANCIAL STATEMENTS WITH SPECIAL REFERENCE TO BMTC, BANGALORE

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**Abstract:** *Transportation industry contributes a major role in the development of a company. Transportation is the systems and modes of conveyance of people and goods from place to Place. It can be considered the major infrastructural element of an area. On august 15,1997, the 50<sup>th</sup> anniversary of independence, the Bangalore transport services (BTS) which, had been managing public transport services in Bangalore city, was bifurcated from the Karnataka stare road transport corporation (KSRTC) and was converted into an independence corporation under the name of Bangalore metropolitan transport corporation (BMTC). The main objective is, to evaluate the financial efficiency, to identify the growth in co-relation with revenues and expenditures of the BMTC during the study period. The present study has been conducted on the basis of secondary data and is descriptive in its nature. The study period was confined to a period of five financial years from 2008-09 to 2012-13. The required secondary data for the study was collected through different websites, annual reports of BMTC and different journals. To make the analysis meaningful advanced statistical tools like – Ratios were applied. To test hypothesizes the correlation and regression was applied with the help of SPSS.21 Software package. The major findings are: The overall rating of the organization is satisfactory in terms of the financial statements of the company. The current liabilities have increased over the period of time than current assets which indicated less liquidity position of the firm. The company quick ratio is not at all satisfactory during the study period except for the year 2010-11 by comparing with standards. It is identified that in the year 2008-09 the net profit is high at 0.66 and thereafter it was gradually decreasing and reached to 0.35 by the year 2012-13. There is high positive correlation between Operating expenses and Non- operating expenses of BMTC. The management should take a serious action to maintain existing operations and improve latest techniques to retain them in the organization and increase profit.*

**Key Words:** *Assets, Borrowings, Correlation, Financial efficiency, Liabilities, Liquidity position, Profitability and Ratio analysis.*

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## **1) INTRODUCTION**

Transportation industry contributes a major role in the development of a company. Transportation is the systems and modes of conveyance of people and goods from place to Place. It can be considered the major infrastructural element of an area.

Modern transportation planning emphasizes the total transportation system rather than isolated facilities. It considers all modes of transport which are economical in an area, as well as all types of improvements, including traffic engineering improvements.

On August 15, 1997, the 50<sup>th</sup> anniversary of independence, the Bangalore transport services (BTS) which, had been managing public transport services in Bangalore city, was bifurcated from the Karnataka state road transport corporation (KSRTC) and was converted into an independence corporation under the name of Bangalore metropolitan transport corporation (BMTC).

Its contribution has been not a little in the sphere of the economy too. Over the years, it has helped turn the wheels of economic progress of Bangalore city and the state. Today it is the only profit making public sector urban transport corporation with no accumulated losses in the country. Its returns are ploughed back to improve the quality of services and help save fuel, contain pollution and ease traffic congestion.

### **FINANCIAL STATEMENT ANALYSIS**

Financial statement analysis includes both analysis and interpretation. A distinction should be made between the two terms. While the term analysis is used to mean simplification of financial data by methodical classification of the data given in the financial statements, the interpretation means explaining the meaning and significance of the data. However both the terms are interlinked to each other.

Financial performance analysis is a process of identifying the financial strengths and weakness of the organization by establishing the relationship between the items of the balance sheet and profit and loss account.

## **2) LITERATURE REVIEW**

**CheenuGoel and ChitwanBhutaniRekhi, (2013)** measured the relative performance of Indian banks. For this study, they used public sector banks and private sector banks. In the service sector, it is difficult to quantify the output because it is intangible. Hence different proxy indicators were used for measuring productivity of banking sector. Segmentation of

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the banking sector in India was done on bank assets size. Overall, the analysis supported the conclusion that new banks were more efficient than old ones. The public sector banks were not as profitable as other sectors were. It means that efficiency and profitability were interrelated. The key to increased performance depends upon ROA, ROE and NIM.

**Marimuthu, K.N (2012)** conducted study on evaluation of textile industry selected Tamil Nadu companies and it revealed the better performance out of 1376 companies in India under CMIE Prowess. Therefore, there was more importance given the company industrial activity performances as per requirement, earning capacity, and share price and profits etc. The study finally revealed that KPRML was efficient in generating income, assets and its overall efficiency was good.

**Rakesh and Kulkarni (2012)** analyzed the Gujarat textile industry working capital evaluation on selected five companies for the eleven years and performed ratio analysis, descriptive statistics etc. The study concluded with all the company financial performance with sound effective as well as current and quick ratio, current asset on total asset, sales, turnover etc. are analyzed with the help of hypothesis and used ANOVA. In this research also researcher followed these attributes.

**Nandi (2011)** made an attempt to examine the influence of working capital Management on corporate profitability. For assessing impact of working capital management on profitability of National Thermal Power Corporation Ltd. during the period of 10 years i.e., from 1999-2000 to 2008-09 Pearson's coefficient of correlation and multiple regression analysis between some ratios relating to working capital management and the impact measure relating to profitability ratio (ROI) had been computed and applied. An attempt had been undertaken for measuring the sensitivity of return of investment (ROI) to changes in the level of working capital leverage (WCL) of the studying company.

### **3) OBJECTIVES OF THE STUDY**

1. To evaluate the financial efficiency of BMTC.
2. To identify the growth in co-relation with revenues and expenditures of the BMTC during the study period.
3. To assess the factors influencing the financial performance of BMTC during the study period.



4. To understand the overall financial position of BMTC.
5. To offer suggestions to improve the financial performance in the future.

#### 4) NEED FOR THE STUDY

1. To analyze the financial statements to study and present conclusions on comparing the expenditure with service.
2. To assess the liquidity and solvency of the firm.
3. The findings of the study can be used as secondary data for the various future study purposes.

#### 5) LIMITATIONS OF THE STUDY

1. As the study is based on secondary data, the inherent limitation of the secondary data would have affected the study.
2. The figures in financial statements are likely to be a least several months out of date, and so might not give a proper indication of the company's current financial position.

#### 6) RESEARCH METHODOLOGY

The present study has been conducted on the basis of secondary data and is descriptive in its nature. The study period is confined to a period of five financial years from 2008-09 to 2012-13. The required secondary data for the study was collected through different websites, annual reports of BMTC and different journals. The researcher selected BMTC for the study. To make the analysis meaningful advanced statistical tools like – Ratios were applied. To test hypothesizes the correlation and regression was applied with the help of SPSS.21 Software package.

#### 7) DATA ANALYSIS

TABLE: 1 SHOWING THE CURRENT RATIO

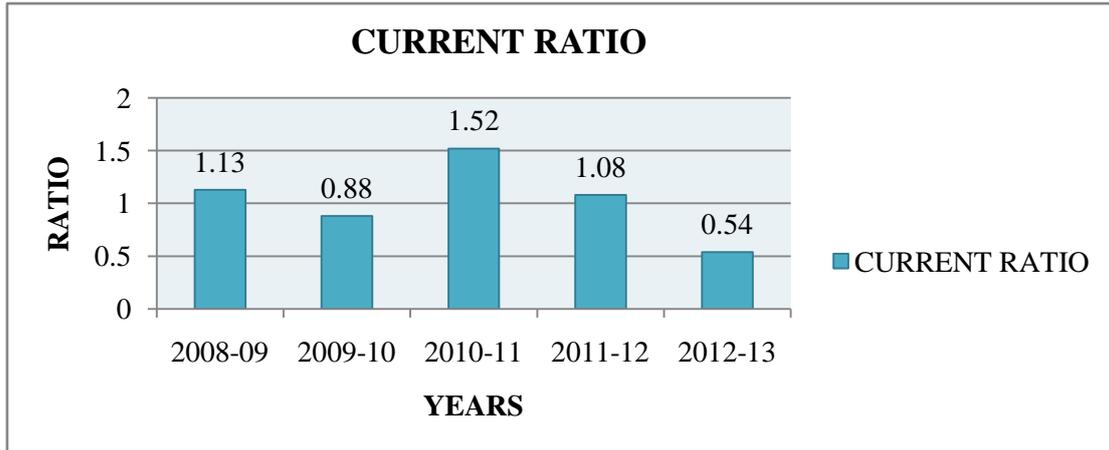
(Rs in lakhs)

Years	Current assets	Current liabilities	Current ratio
2008-09	12,815	11,376	1.13
2009-10	13,267	15,107	0.88
2010-11	14,087	9,267	1.52
2011-12	12,237	11,280	1.08
2012-13	14,463	26,816	0.54

Source: Data compiled from annual reports of BMTC.



Graph – 1



**Interpretation:** The standard current ratio is 2:1. Table 1 reveals the current ratio in the year 2012-13 is the lowest at 0.54 with slight variations in the rest of the year and the highest being 1.52 in the year 2010-11. This is an indication that the firm did not have sound liquid position to meet its current recommended the strong obligation.

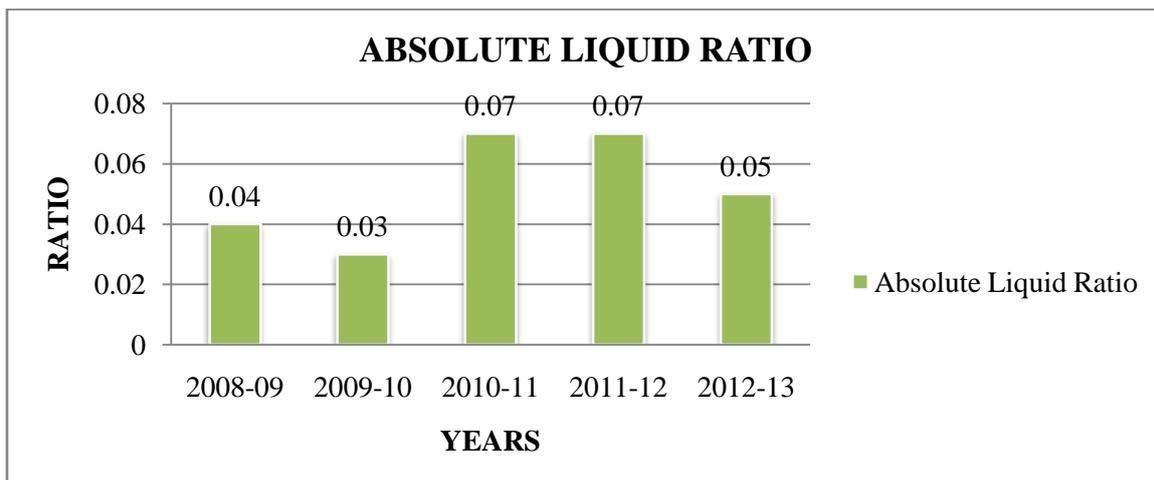
TABLE: 2 SHOWING ABSOLUTE LIQUID RATIO

(Rs in lakhs)

Years	Cash in hand and bank + Short term marketable securities	Fixed assets	Absolute Liquid Ratio
2008-09	469	11,376	0.04
2009-10	505	15,107	0.03
2010-11	691	9,267	0.07
2011-12	781	11,280	0.07
2012-13	1,408	26,816	0.05

Source: Data compiled from annual reports of BMTC.

Graph – 2





**Interpretation:** The standard absolute liquid ratio should be 1:2 or 0.5:1. From table 2 it is identified that the absolute liquid ratio has very low by comparing standard ratio during study period. The company does not maintain enough cash balances to meet its daily requirements. It is strongly recommended to the BMTC to maintain sufficient cash balances to meet its daily requirements, so that the absolute liquid ratio meets the standard ratio of 0.5:1.

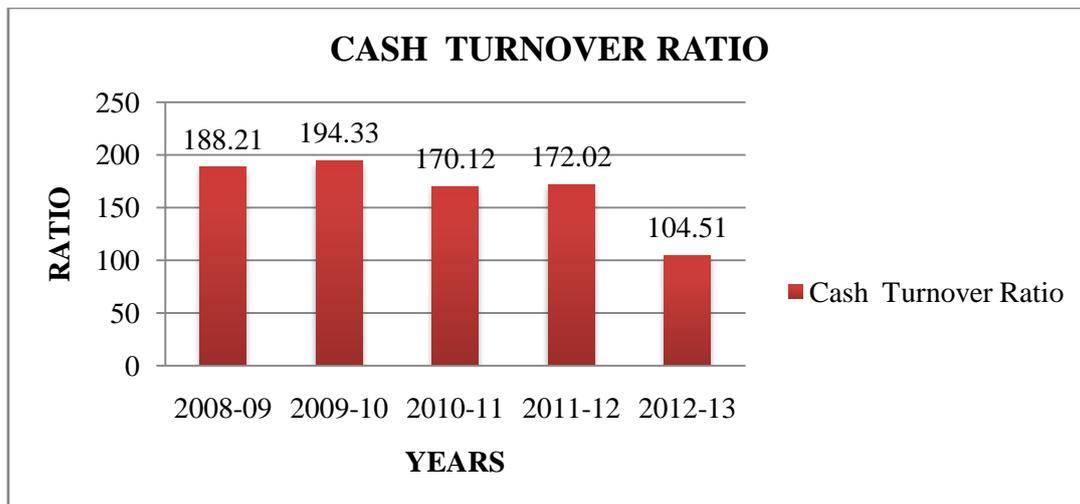
**TABLE: 3 SHOWING CASH TURNOVER RATIO**

(Rs. in lakhs)

Years	Sales	Cash	Cash Turnover Ratio
2008-09	88,270	469	188.21
2009-10	98,136	505	194.33
2010-11	1,17,551	691	170.12
2011-12	1,34,348	781	172.02
2012-13	1,47,158	1,408	104.51

Source: Data compiled from annual reports of BMTC.

**Graph- 3**



**Interpretation:** The table 3 shows the cash turnover ratio. The standard or ideal cash turnover ratio is 10:1. It indicates the effective utilization of cash resources of the company. The company had recorded highest cash turnover ratio in the year 2009-10 was 194.33. From the year 2008-09 to 2012-13 cash turnover ratio showed overall decreasing trend from 188.21 to 104.51. But all the years showed very good cash turnover ratio compared to the standards.



**TABLE: 4 SHOWING WORKING CAPITAL TURNOVER RATIO**

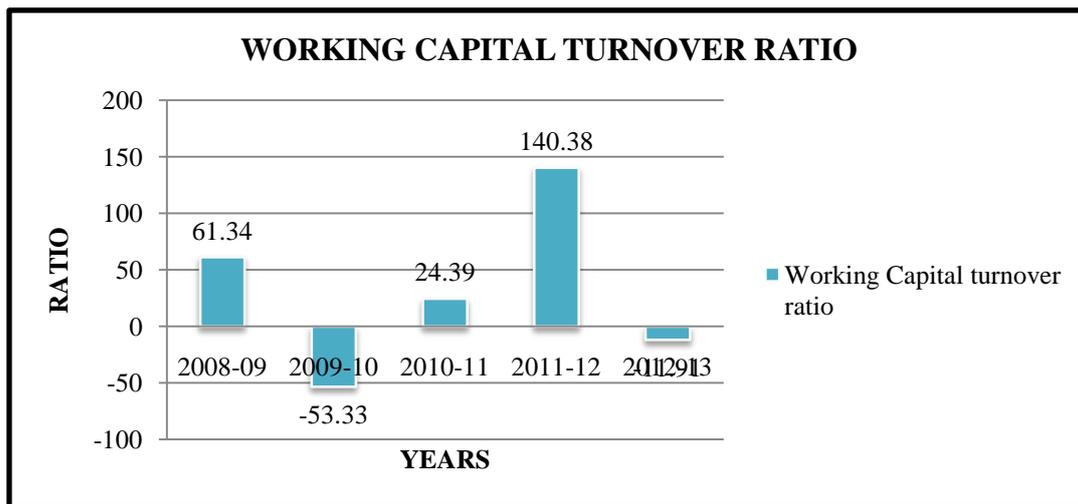
(Rs. in lakhs)

Years	Sales	Working Capital	Working Capital turnover ratio
2008-09	88,270	1,439	61.34
2009-10	98,136	-1,840	-53.33
2010-11	1,17,551	4,820	24.39
2011-12	1,34,348	957	140.38
2012-13	1,47,158	-12,353	-11.91

Source: Data compiled from annual reports of BMTC.

**Working capital = Current assets – Current liabilities**

**Graph - 4**



**Interpretation:** Lower the working capital ratio indicates the inefficiency of the management. The company had negative working capital in the year 2009-10 and 2012-13. The negative working capital is very good sign for management of current assets and current liabilities. In the year 2008-09 to 2012-13 the company has working capital turnover ratio 61.34, -53.33, 24.39, 140.38 and -11.91 respectively.

**TABLE: 5 SHOWING CURRENT ASSETS TO FIXED ASSETS TURNOVER RATIO**

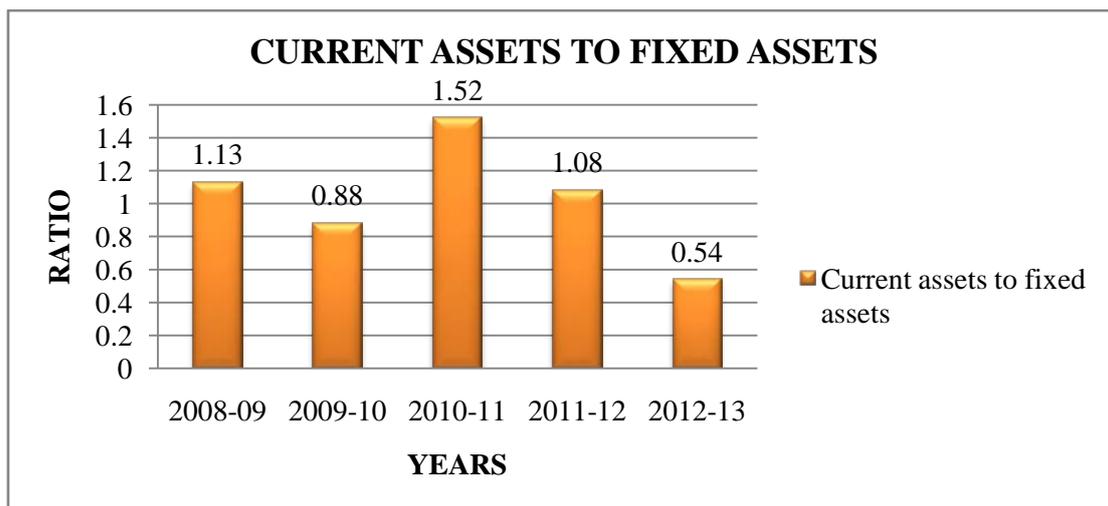
(Rs. in lakhs)

Years	Current assets	Fixed assets	Current assets to fixed assets
2008-09	12,815	11,376	1.13
2009-10	13,267	15,107	0.88
2010-11	14,087	9,267	1.52
2011-12	12,237	11,280	1.08
2012-13	14,463	26,816	0.54

Source: Data compiled from annual reports of BMTC.



Graph-5



**Interpretation:**Table 4.6 showed the Current Assets to fixed assets turnover ratio for the study period from 2008-09 to 2012-13 is 1.13, 0.88, 1.52, 1.08 and 0.54 respectively. It was having insufficient Current Assets to run the business.

TABLE: 6 SHOWING CAPITAL TURNOVER RATIO

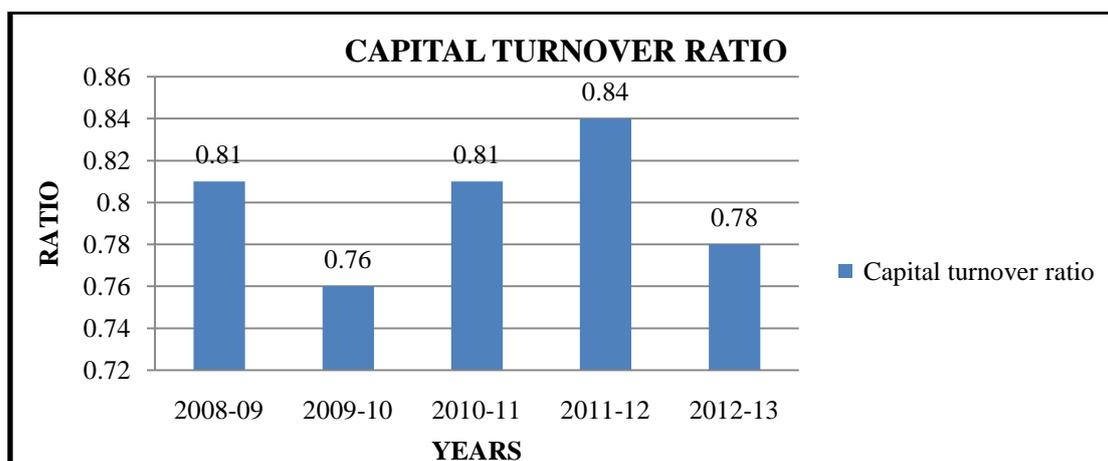
(Rs. in lakhs)

Years	Sales	Capital Employed	Capital turnover ratio
2008-09	88,270	1,08,579	0.81
2009-10	98,136	1,28,726	0.76
2010-11	1,17,551	1,44,327	0.81
2011-12	1,34,348	1,60,609	0.84
2012-13	1,47,158	1,89,036	0.78

Source: Data compiled from annual reports of BMTC.

**Capital Employed = Total Assets – Current Liabilities.**

Graph –6





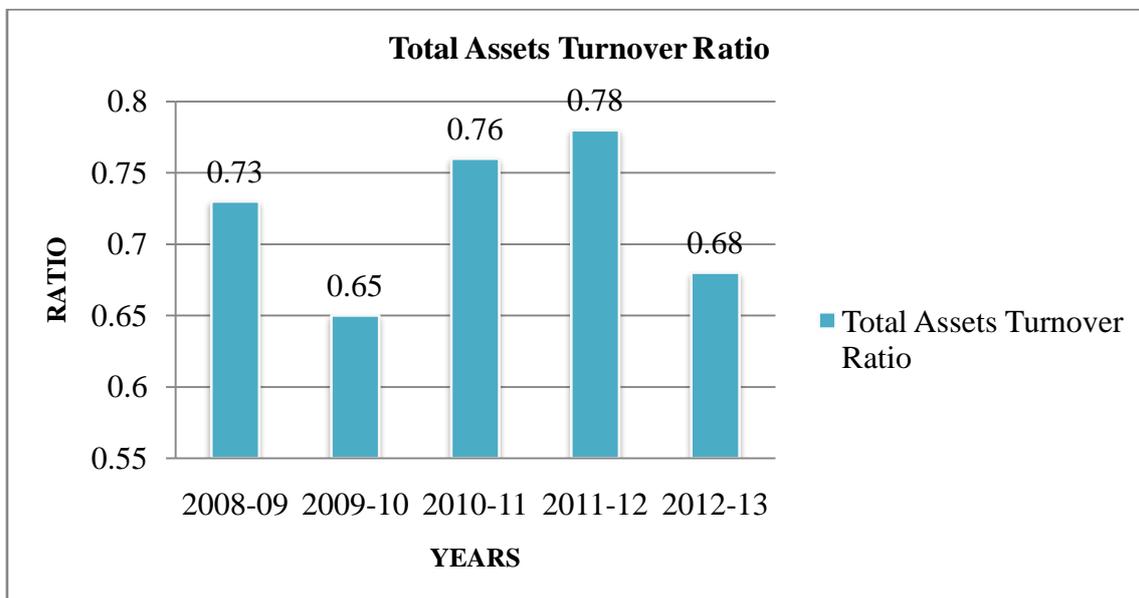
**Interpretation:** Increase in the capital turnover ratio shows improvement in management of capital employed. From the table 6 the Capital turnover ratio from identified from the year 2008-09 to 2012-13 are 0.81, 0.76, 0.81, 0.84, and 0.78 respectively. It indicated that the company had not performed well to improve the sales to increase Capital Turnover Ratio.

**TABLE: 6 SHOWING TOTAL ASSETS TURNOVER RATIO**  
(Rs. in lakhs)

Years	Sales	Assets	Total Assets Turnover Ratio
2008-09	88,270	1,19,955	0.73
2009-10	98,136	1,49,833	0.65
2010-11	1,17,551	1,53,594	0.76
2011-12	1,34,348	1,71,889	0.78
2012-13	1,47,158	2,15,852	0.68

Source: Data compiled from annual reports of BMTC.

**Graph – 6**



**Interpretation:** Table 6 shows Total Assets Turnover Ratio. The highest ratio recorded in the year 2011-12 is 0.78 and the lowest in the year 2009-10 is 0.65. The ratio showed overall decreasing trend during the study period. It is suggested to the company to increase sales to utilize assets efficiently in the future.



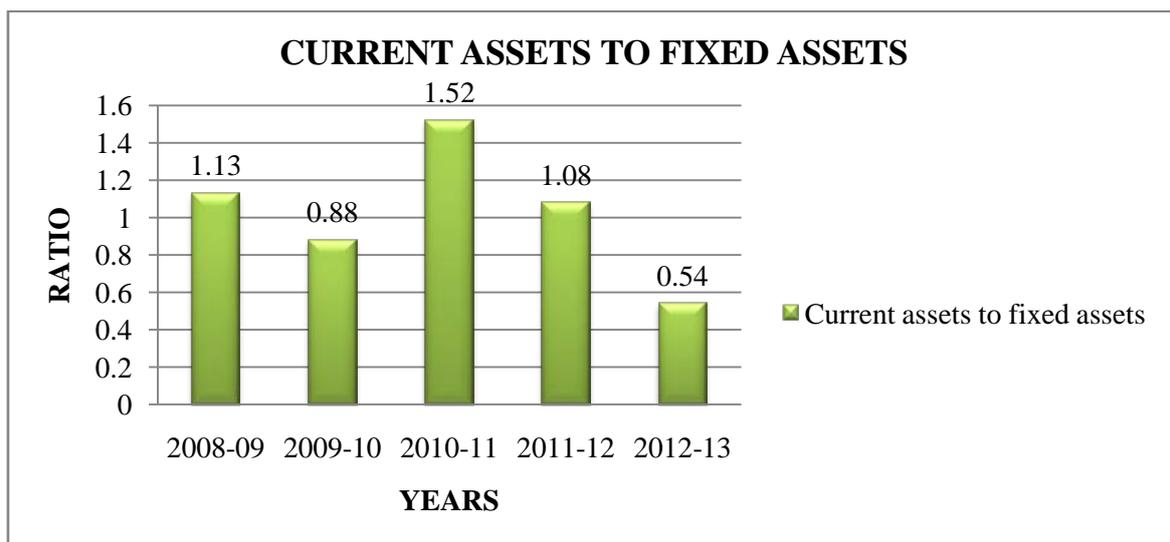
**TABLE: 7 SHOWING CURRENT ASSETS TO FIXED ASSETS TURNOVER RATIO**

(Rs. in lakhs)

Years	Current assets	Fixed assets	Current assets to fixed assets
2008-09	12,815	11,376	1.13
2009-10	13,267	15,107	0.88
2010-11	14,087	9,267	1.52
2011-12	12,237	11,280	1.08
2012-13	14,463	26,816	0.54

Source: Data compiled from annual reports of BMTC.

**Graph- 7**



**Interpretation:**Table 7 showed the Current Assets to fixed assets turnover ratio for the study period from 2008-09 to 2012-13 is 1.13, 0.88, 1.52, 1.08 and 0.54 respectively. It was having insufficient Current Assets to run the business.

**TABLE: 8 SHOWING NET PROFIT TURNOVER RATIO**

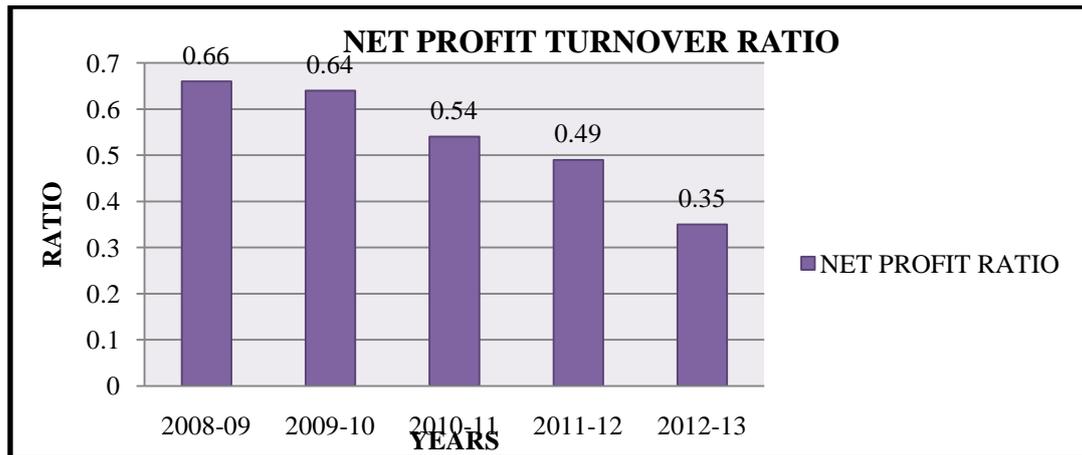
(Rs. in lakhs)

Years	Net profit	Net Sales	Net Profit Ratio
2008-09	58,755	88,270	0.66
2009-10	62,521	98,136	0.64
2010-11	64,163	1,17,551	0.54
2011-12	66,305	1,34,348	0.49
2012-13	51,509	1,47,158	0.35

Source: Data compiled from annual reports of BMTC.



Graph – 8



**Interpretation:** A low Net profit ratio is preferable as it indicates lower profitability from the table 8 it is identified that in the year 2008-09 the net profit is high at 0.66 and thereafter it was gradually decreasing and reached to 0.35 by the year 2012-13. It is suggested for the company to improve net profit position in future since the profit motive is the main objective to survive business.

#### **HYPOTHESIS 1:**

**Null Hypothesis:** There is no actual correlation between operating expenses and non-operating expenses of BMTC.

**Alternative hypothesis:** There is a correlation between operating expenses and non-operating expenses of BMTC.

**Interpretation:** Null Hypothesis is Rejected as APPENDIX-1 Pearson Correlation is 0.960, and  $p = 0.01$  ( $p < 0.05$ ) at confidence level of 0.01. Since  $p < 0.05$ , indicates there is high positive correlation between Operating expenses and Non- operating expenses of BMTC. Hence

**Alternative hypothesis** is accepted.

#### **HYPOTHESIS 2:**

**Null Hypothesis:** There is no actual correlation between Operating Revenue and Non-Operating Revenue of BMTC.

**Alternative hypothesis:** There is a correlation between Operating Revenue and Non-Operating Revenue of BMTC.

**Interpretation:** Alternative Hypothesis is Rejected as APPENDIX-2 Pearson Correlation is -0.522, and  $p = 0.336$  ( $p > 0.05$ ) at confidence level of 0.01. Since  $p > 0.05$ , indicates there is



negative correlation between Operating revenue and Non- operating revenue of BMTC. Hence **Null hypothesis** is accepted.

#### **HYPOTHESIS 3:**

**Null Hypothesis:** There is no actual correlation between Total Expenses and Total Revenue of BMTC.

**Alternative hypothesis:** There is a correlation between Total Expenses and Total Revenue of BMTC.

**Interpretation:** Alternative Hypothesis is Rejected as APPENDIX-3 Pearson Correlation is - 0.784, and  $p = 0.117$  ( $p > 0.05$ ) at confidence level of 0.01. Since  $p > 0.05$ , indicates there is negative correlation between total expenses and total revenue of BMTC. Hence **Null hypothesis** is accepted.

#### **HYPOTHESIS 4:**

**Null Hypothesis:** There is no significant impact of Income and Expenditure on Profitability of BMTC.

**Alternative hypothesis:** There is a significant impact of Income and Expenditure on Profitability of BMTC.

**Interpretation: A model Summary** table APPENDIX-4 provides the R and  $R^2$  value. The R value is 0.736, which represents the simple correlation. It indicates lower degree of correlation between Income & expenditure and Net Profit. Since the  $R^2$  value is 54.2 per cent approximately for Income & expenditure, it shows that Net profit is affected by 54.2 per cent and remaining 45.8 per cent by some other factor. **ANOVA** Table indicates that the regression model predicts the outcome variable significantly well,  $p < 0.458$ , which is higher than 0.05 and we can say that, there is no significant impact of income and expenditure on profitability of BMTC by rejecting null hypothesis. Table shows **Coefficients** provide us with information on each predictor variable. So the regression equation can be framed as:

**Net Profit = 92866.75(Total Revenue) -0.112(Income) -0.200 (Expenditure)**

#### **8) FINDINGS:**

- The current liabilities have increased over the period of time than current assets which indicated less liquidity position of the firm.
- The company quick ratio at all satisfactory during the study period except for the year 2010-11 by comparing with standards.



- It is identified that the absolute liquid ratio has very low by comparing standard ratio during study period.
- The company performed well by showing increasing trend in Current asset turnover ratio for the years 2008-09 to 2012-13 is 6.89, 7.39, 8.34, 10.98 and 10.17 respectively.
- From the year 2008-09 to 2012-13 cash turnover ratio showed overall decreasing trend from 188.21 to 104.51. But all the years showed very good cash turnover ratio compared to the standards.
- The company had negative working capital in the year 2009-10 and 2012-13. The negative working capital is very good sign for management of current assets and current liabilities. In the year 2008-09 to 2012-13 the company has working capital turnover ratio 61.34,-53.33, 24.39, 140.38 and -11.91 respectively.
- Capital turnover ratio from identified from the year 2008-09 to 2012-13 are 0.81, 0.76, 0.81, 0.84, and 0.78 respectively. It indicated that the company had not performed well to improve the sales to increase Capital Turnover Ratio.
- Total Assets Turnover Ratio showed overall decreasing trend during the study period. The highest ratio recorded in the year 2011-12 is 0.78 and the lowest in the year 2009-10 is 0.65.
- It is identified that in the year 2008-09 the net profit is high at 0.66 and thereafter it was gradually decreasing and reached to 0.35 by the year 2012-13.
- There is high positive correlation between Operating expenses and Non- operating expenses of BMTC.
- There is negative correlation between Operating revenue and Non- operating revenue of BMTC.
- There is negative correlation between total expenses and total revenue of BMTC.
- There is no significant impact of income and expenditure on profitability of BMTC.

## **9) SUGGESTIONS:**

- The company didn't maintained enough cash balances to meet its daily requirements. It is strongly recommended to the BMTC to maintain sufficient cash balances to meet its daily requirements, so that the absolute liquid ratio meets the standard ratio of 0.5:1.



- It is suggested to the company to increase sales to utilize assets efficiently in the future.
- It is suggested for the company to improve net profit position in future since the profit motive is the main objective to survive business.

## **10) CONCLUSION:**

BMTC is the oldest and well established public limited company which has made a sufficient name and fame in the minds of public for the services offered. BMTC has a very good reputation for its brand name and quality service. Based on the evaluation method the project may be concluded that Financial Performance Analysis i.e. Ratio Analysis, correlation, etc. has helped in analyzing its performance by using various statistical tools. From the above Ratio analysis it is clear that the Organization didn't maintained enough cash balances to meet current requirements. However the overall financial status of BMTC is satisfactory. We also see that the management is implementing effective business strategies, acting as a favorable sign. Overall company is performing well but the company has to take care about the net profit in the future.

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- [www.wikipedia.com](http://www.wikipedia.com)

**Annual Reports** Bangalore metropolitan transport corporation (BMTC) from (2008-09 to 2012-13)

**APPENDIX-1**

Correlations			
		Operating expenses	Non-operating expenses
Operating expenses	Pearson Correlation	1	.960**
	Sig. (2-tailed)		.010
	N	5	5
Non-operating expenses	Pearson Correlation	.960**	1
	Sig. (2-tailed)	.010	
	N	5	5

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**APPENDIX-2**

Correlations			
		Operating revenue	Non-operating revenue
Operating revenue	Pearson Correlation	1	-.522
	Sig. (2-tailed)		.366
	N	5	5
Non-operating revenue	Pearson Correlation	-.522	1
	Sig. (2-tailed)	.366	
	N	5	5



**APPENDIX-3**

Correlations			
		Total expenses	Total revenue
Total expenses	Pearson Correlation	1	-.784
	Sig. (2-tailed)		.117
	N	5	5
Total revenue	Pearson Correlation	-.784	1
	Sig. (2-tailed)	.117	
	N	5	5

**APPENDIX-4**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.736 <sup>a</sup>	.542	.083	5561.60154

a. Predictors: (Constant), Expenditure, Income

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	73106915.851	2	36553457.926	1.182	.458 <sup>b</sup>
	Residual	61862823.349	23	0931411.674		
	Total	134969739.200	4			

a. Dependent Variable: Net profit  
b. Predictors: (Constant), Expenditure, Income

Coefficient <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	92866.752	21210.752		4.378	.048
1 Income	-.112	.090	-.956	-1.240	.341
Expenditure	-.200	.130	-1.185	-1.536	.264

a. Dependent Variable: Net profit