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# A Study on Working Capital Management in Tamilnadu State Transport Corporation (Villupuram) Limited.

Miss. M. Saranya<sup>1</sup>, Dr. T.K. Senthil Kumar<sup>2</sup>

<sup>1</sup>Ph.D Research Scholar, <sup>2</sup>Assistant Professor, Department of Commerce, Annamalai University, Annamalai Nagar- 608 002, Tamilnadu, India

\*Corresponding Author Miss. M. Saranya

Email: saranya.phd13@gmail.com

Abstract: Transport industry is one of the key industries of nation's economy. It transports person, goods and so on. Generally private transport services are given between two towns; where there is more demand in order to make profit. But transport is needed every nook and corners of the country. So the government of Tamilnadu provides transport facility through transport corporations. TNSTC (Villupuram) ltd. is the biggest transport corporation in the state. Efficient working capital management is important in transport industry. Hence the study has been undertaken to analyze working capital management of the corporation. The present study is based on secondary data, they were collected from annual reports of TNSTC (Villupuram) Limited. for the period of ten years from 2004-2005 to 2013-2014. The study used ratio analysis as financial tool. The study evidenced that working capital of the corporation was negative during all the years of the study period. Current ratio of the corporation was less than 0.5 times during all the years except during 2004-2005. It showed poor working capital management of the corporation. The results of average collection period was less than month during eight year of the study period, but average payment period was lower than average collection period during most of the years of the study period. It showed that their collection management was satisfactory but payment management was not so.

Keywords: Working Capital, Debtors, Creditors, Turnover, and Collection Period

#### INTRODUCTION

Transport plays a vital role in our day-to-day life. Early people had no transport. People moved from one place to another on foot. Later on, when people had tamed the animals like horse, donkey, camel, etc., People built the cart using wheels; horses, donkeys, oxen, etc. pulled the cart. For travel on water, people used logs and rafts. People built boats later, in which people traveled by rowing. Still later, people invented sailboats, which used wind power to sail on the rivers and seas. Man was spared of the hard labor of rowing the boat. Transport may be defined as a service of facility, which creates utilities, time or place, through the physical transfer of goods and persons from one place to another. The need for conveyance of goods arises from the fact that they are often produced in one region and desired in another. The transportation of person arises from the need of individuals to go from one place to another connected with business, social, cultural or recreational interests. Transportation is the vital factor in the advancement of civilization and economic development. It is the life-blood of commerce. People use different means of transport system are in use to transport men and commodities from one place to another.

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 transportation system rather than isolated facilities. This corporation was incorporated during 1975 and came into existence with effect from 16-01-1975 with the fleet strength of buses to provide efficient, economical well co-ordinate transport facility to the public of north arcot, south district and union territory of Pudhucherry. This corporations which were in the name of political leaders have been renamed with effect from 1997 as TNSTC (VPM DIVN-I), TNSTC (VPM DIVN-II), TNSTC (VPM DIVN-III), with its headquarters at Villupuram, Vellore, Kancheepuram respectively. As a major transport corporation, it is important to study its financial management. Hence the study has analyzed working capital management of Villupuram Transport Corporation.

#### REVIEW OF LITERATURE

Pereia[1]made a study on "The Financial Performance of The Pallavan Transport Corporation" and observed that PTC, like many other metropolitan transport services was incurring loss mostly due to leakage of revenue, the magnitude of which varies from 8 per cent to 15 per cent of the total revenue on a modest estimate. The researcher stressed that the financial readability of transport system is dependent on the integrity and efficiency of the checking staff.

Sridhara G & N. Sathyanarayana[2], in this study focused on the analysis of financial statement with special reference BMTC, Bangalore. The study found that the overall rating of the organization was 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. Quick ratio of the company was not satisfactory except during 2010-11.

#### **Statement of the Problem**

Transport industry is one of the key industries of nation's economy. It transports person, goods and so on. Movement from one place to another place is must even in everyday life. Generally private transport services are given between two towns; where there is more demand in order to make profit. But transport is needed every nook and corners of the country. So the government of Tamilnadu provides transport facility through transport corporations. TNSTC (Villupuram) ltd. is the biggest transport corporation in the state. Efficient working capital management is important in

transport industry. Hence the researcher has studied working capital management and their components.

#### Scope of the study

The present study is an attempt to identify the various financial problems faced by TNSTC (Villupuram) Limited. The study is confined only with the working capital management in TNSTC (Villupuram) Limited. Other financial performances are considered out of the scope.

#### METHODOLOGY

The present study is based on secondary data. The secondary data were collected from annual reports of TNSTC (Villupuram) Limited. for the period of ten years from 2004-2005 to 2013-2014. The collected information's were analyzed with the help of appropriate tools like ratio analysis, percentage and CAGR [3].

#### **Objectives**

- 1. To study the working capital management of TNSTC (Villupuram) Limited.
- 2. To study the components of working capital management in TNSTC (Villupuram) Limited.

#### **Working Capital and Current Ratio**

Working capital is the difference between current assets and current liabilities. Table 1 presents the results of net working capital and current ratio of TNSTC (Villupuram) Limited.

Table 1: Working Capital and Current Ratio(Rs. in Crore)

	Current	Current	Working	Current Ratio
Year	Assets (Rs.)	Liabilities(Rs.)	Capital (Rs.)	(Times)
2004-2005	71.03	127.44	-56.41	0.56
2005-2006	69.55	174.13	-104.58	0.40
2006-2007	40.16	138.52	-98.36	0.29
2007-2008	50.84	150.71	-99.88	0.34
2008-2009	58.16	191.13	-132.97	0.30
2009-2010	66.89	255.06	-188.17	0.26
2010-2011	91.86	345.65	-253.78	0.27
2011-2012	95.51	717.64	-622.13	0.13
2012-2013	173.40	798.17	-624.76	0.22
2013-2014	236.03	915.66	-679.63	0.26
Mean	95.34	381.41	-286.07	0.25
SD	61.80	306.46	-252.14	0.20
CV%	64.82	80.35	88.14	80.67
Compound Annual Growth Rate %	12.76	21.80	-28.26	-

Source: Computed from Annual Report of TNSTC (Villupuram) Limited.

Table-1 reports the position of current assets, current liabilities and working capital for the study period of ten years from 2004-2005 to 2013-2014. It also gives the results of Mean, Standard Deviation, Coefficient of Variation and Compounded Annual Growth

Rate. The results indicated that Current Assets of the corporation increased during the study period from Rs. 71.03 crore in 2004-2005 to Rs. 236.03 crore in 2013-2014. Current Assets of the Corporation ranged from Rs. 40.16 crore to Rs. 236.03 crore over the study

period. It was found to be low in 2006-2007 (40.16 crore) and it was high during 2013-2014 (Rs. 236.03 crore). There was a sudden increase in Current Assets during 2012-2013 over the previous year from Rs. 95.51 crore to Rs. 193.40 crore. The Mean value of Current Assets was Rs. 95.34 crore. The results of Standard Deviation and Co-efficient of Variation stood at Rs. 61.80 crore and 64.82 per cent respectively, it indicated moderate level of deviation of Current Assets from its Mean value. The calculated value of Compounded Annual Growth Rate (12.76%) showed a considerable growth in Current Assets during the study period.

Amount of Current Liabilities also increased during the study period. It was Rs. 127.44 crore during 2004-2005 and it increased to Rs. 915.66 crore during 2013-2014. Current Liability of the corporation increased by about 100 per cent during 2011-2012. Over the previous year from Rs. 345.65 crore to Rs. 717.64 crore. The Mean value of Current Liabilities of the Corporation seems to be high, which was Rs. 381.41 crore. Standard Deviation and Co-efficient of Variation of Current Liabilities was Rs. 306.46 crore and 80.35 per cent respectively, it showed high level of deviation in Current Liabilities from its Mean value. Current Liabilities increased at a high rate during the study period as per the result of Compounded Annual Growth Rate (21.80%).

It was observed that Current Liabilities of the Corporation was higher than Current Assets during all the years of the study period and it resulted negative Working Capital during all the years. Working Capital of the Corporation decreased severely during the study period. Working Capital of the Corporation was negative during 2004-2005 at Rs. 56.41 crore and it continued negative during all the years of the study period and it was increasing. The negative Working Capital was high during 2013-2014 with Rs. 679.63

crore. The Mean value of Working Capital was also negative (Rs. 286.07 cr). High level of deviation was found in Working Capital of the Corporation from its Mean value as per the results of Standard Deviation and Co-efficient of Variation at Rs. 252.14 crore and 88.14 per cent respectively. There was high adverse growth in Working Capital of the Corporation over the study period as per the result of Compounded Annual Growth Rate (-28.26%).

It was observed from the results of the above table that Working Capital of the Corporation was negative during all the years of the study period and also the negative Working Capital was becoming severed year by year. It exhibits poor Working Capital Management of the Corporation during the study period.

The results showed that a Current Ratio of the Corporation was very low during all the years of the study period. It was also observed that Current Ratio of the Corporation was decreasing up to 2011-2012 and there was slight increase during 2012-2013 and 2013-2014. Current Liabilities of the Corporation was more than Current Assets during all the years of the study period and it resulted the Current Ratio less than one. The ratio was comparatively high during the year 2004-2005 at 0.56:1 and it was low during 2011-2012 at 0.13:1. The results showed poor working capital management of the Corporation during all the years of study period. The results of Mean value of Current Ratio also supported the result.

#### **Turnover Ratio**

Table 2 presents the results of Working capital turnover ratio, Debtors turnover ratio, Creditors turnover ratio and Cash position ratio of TNSTC (Villupuram) Ltd.

**Table 2: Turnover Ratio of Working Capital and their Components** 

Year	Working Capital	<b>Debtor Turnover</b>	<b>Creditor Turnover</b>	Cash Turnover
	Turnover Ratio (Times)	Ratio (Times)	Ratio (Times)	Ratio(Times)
2004-2005	-10.97	12.53	11.04	0.04
2005-2006	-6.31	15.75	6.48	0.02
2006-2007	-7.39	39.30	10.89	0.03
2007-2008	-8.17	34.31	13.60	0.05
2008-2009	-6.66	26.92	36.47	0.02
2009-2010	-4.91	23.13	9.03	0.01
2010-2011	-3.87	15.03	10.83	0.01
2011-2012	-1.84	20.68	20.10	0.01
2012-2013	-2.22	11.04	37.98	0.01
2013-2014	-2.04	8.37	43.97	0.01
Mean	-3.33	15.41	15.28	0.01
SD	1.10	5.85	10.33	0.01
CV%	-32.91	37.94	67.57	62.38

Source: Computed from Annual Report of TNSTC (Villupuram) Limited.

The ratio gives a clear picture of working capital turnover of the corporation and shows a fluctuating trend during all the years of the study period. It ranges between a minimum of -1.84 times in 2011-2012 and maximum of -10.97 times in 2004-2005. Working capital of the corporation decreased severely during the study period. The negative WCTR was high during 2004-2005 (-10.97 times). Thereafter it was continuously decreasing, it decreased from -6.31 (2005-2006) to -2.04 (2013-2014). The mean value of working capital turnover ratio of the corporation was low at -3.33 times respectively. Standard deviation and coefficient of variation of WCTR was -1.10 times and -32.91 per cent over the ten years of the study period, it showed low level of deviation in the ratio from its mean value

The ratio was in fluctuating trend during all the years of the study period. The lowest turnover ratio was stood in the year 2013-2014 (8.37 times) followed by 2012-2013 (11.04 times) and 2004-2005 (12.53 times). Highest turnover ratio stood in the year 2006-2007 at 39.30 times followed by 2007-2008 at 34.31 times. Low debtors turnover ratios were found during 2013-2014, 2012-2013, 2005-2006 and 2004-2005, it showed high proposition of sundry debtors of the corporation and the ratio was, high during after years the ratio stood high hence during those years the amount of sundry debtors was very low compared to its operating revenue. The variation in the debtor's turnover ratio was high, it was 39.30 times in 2006-2007 and a low ratio was 8.37 times in 2013-2014. The mean value of DTR of the corporation was 15.41 times respectively. Standard deviation and co-efficient of variation was

5.85 times and 37.94 per cent so, the deviation in the ratio from its mean value was moderate.

The creditor's turnover ratio of TNSTC (Villupuram) limited ranged from 6.48 times to 43.97 times during the study period. The ratio was fluctuating all the years of the study period. In 2005-06 the ratio was decreased to 6.48 times to 9.03 times in 2009-10 because the credit purchases were tremendously increasing during this period. It increased to 37.98 times in 2012-13 to 43.97 times 2013-14, the creditor decreased and purchases were in increasing trend hence, the ratio should be increased. The mean value of the CTR was 15.28 times respectively. Standard deviation and co-efficient of variation was 10.33 times and 67.57 per cent so; the standard deviation about the mean was very high.

The ratio was met very low level of fluctuation during all the years of the study period. The cash position ratio was 0.04 times in 2004-2005, there was a small variation up to 0.05 times in 2007-2008. It decreased up to 2008-2009 to 2013-2014. The cash position ratio was a minimum of 0.01 times during 2009-2010 to 2013-2014 and maximum of 0.05 times in 2007-2008. The mean value of the cash position ratio was 0.01 times respectively. Standard Deviation and Co-efficient of variation was 0.01 times and 62.38 per cent.

## Average Collection period and Average payment Period

Table 3 presents the results of average collection period and average payment period ratio of TNSTC (Villupuram) Limitd.

**Table 3: Average Collection and Payments Period** 

Year	Average Collection Period(days)	Average Payment Period (days)	
2004-2005	29.13	33.05	
2005-2006	23.17	56.32	
2006-2007	9.29	33.52	
2007-2008	10.64	26.84	
2008-2009	13.56	10.01	
2009-2010	15.78	40.40	
2010-2011	24.28	33.70	
2011-2012	17.65	18.16	
2012-2013	33.07	9.61	
2013-2014	43.60	8.30	
Mean	23.68	23.88	
SD	62.43	35.35	
CV%	263.59	540.21	

Source: Computed from Annual Report of TNSTC (Villupuram) Limited

The Average Collection period of TNSTC (Villupuram) limited ranged from 9.29 days to 43.63 days. The average collection period was short in the

year 2006-2007 (9.29 days). It was high during 2013-2014 (43.63 days). The average collection period was decreasing all the years of the study period. In no year it

was more than 50 days. It ended at 43.60 days in during 2013-2014. The Mean value of the ratio was 23.68 days. Standard Deviation and co-efficient of variation of the ratios was 62.43days and 263.59 per cent, it showed very wide deviation in average collection period from its mean value. The mean value of average collection period was less than a month (23.68 days), it shows efficiency of the corporation in collecting its dues from sundry debtors.

The Average payment period of the TNSTC (Villupuram) limited showed the ratio ranged from 8.30 days to 56.32 days. The trend of creditor's payment period was fluctuating during all the years of the study period. It was low in three years of the study period. The high level of creditor's payment period indicated that the corporation managed its payables efficiency. It was high during 2005-2006 (56.32 days) and 2009-2010 (40.40 days) but, it suddenly decreased in 2011-2012 (18.16 days), 2012-2013 (9.61 days) and 2013-2014 (8.30 days). The highest ratio stood at 56.32 days in the year 2005-2006 it showed efficient extent of making payments to its creditors. The Mean value of the ratio was 23.88 days. Standard deviation and Co-efficient of variation of average payment period was 35.35 days and 540.21 per cent ten years of the study period respectively.

#### **CONCLUSION**

The study analyzed working capital management of TNSTC (Villupuram) Ltd. for the period of ten years from 2004-2005 to 2013-2014. The study evidenced that working capital of the corporation was negative during all the years of the study period. Current ratio of the corporation was less than 0.5 times during all the years except during 2004-2005. It showed poor working capital management of the corporation. The results of average collection period was less than month during eight year of the study period, but average payment period was lower than average collection period during most of the years of the study period. It showed that their collection management was satisfactory but payment management was not so.

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