

Financial Performance Analysis Of Major Ports In India - A Study With Special Reference To Tuticorin Port Trust

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INTRODUCTION

Financial Analysis is the process of identifying the financial strength and weakness of a firm by properly establishing relationship between the items of the balance sheet and the profit and loss account. Financial analysis is also the process of determining the significant operating financial characteristics of a firm - from accounting and financial statements. The first task of a financial analyst is to select the information contained in the financial statement. The second step in financial analysis is to arrange the information in a way to highlight the significant relationship, and the final step is the interpretation and drawing of inferences, conclusions from the analysis.

Financial Statement Analysis focuses on evaluation of past operations as revealed by the analysis of basic statements. Financial statement analysis embraces the methods used in assessing and interpreting the results of past performance and current financial position as they relate to particular factors of interest in investment decisions. It is an important means of assessing past performance and in forecasting and planning future performance.

The analysis of a financial statement is an important aid to financial analysis. The focus of financial analysis is a key figure contained in the financial statement and the significant relationship that exists between them. Financial analysis necessarily involves financial statement analysis. The analysis of a financial statement is the process of evaluating a relationship between component parts of financial statements to obtain a better understanding of the firm's positions and performance.

According to Myre's, *"Financial management analysis is largely a study of various financial factors in a business as disclosed by a single set of statement and a study of the trend of these factors as shown in a series of statements."*

According to Lev, *"Financial Statement Analysis is an information processing system designed to provide data for decision making models, such as the portfolio selection model, bank lending decision models, and corporate financial management models."*

This article analyses the financial performance of Tuticorin Port Trust (TPT), which is one of the major ports of India.

OBJECTIVES AND METHODOLOGY

The objective of this article is to analyze the financial performance of Tuticorin Port Trust. The Case study approach is followed. Tuticorin Port Trust, one of the major ports of India, is taken for the study. In order to analyze the financial performance, Ratio Analysis and Trend Analysis were used. The analysis was done for a period of 10 years, i.e. 1997-98 to 2006-07. The whole study has been done on the basis of secondary data. The secondary data used in this study were collected from the officials of the port, Administrative report of the port, Daily newspaper, Ministry of Commerce, Magazines of the port, and also the data collected through the port website www.tuticorinport.gov.in. Method of Least squares was adopted to calculate the trend values.

PROFILE OF TUTICORIN PORT TRUST

Tuticorin was declared as the 10th major port of India on July 11, 1974. That made Tamil Nadu the only state in India with three major ports. Tuticorin has been a centre for maritime trade and pearl fishery for more than a century. The natural harbor, with a rich hinterland activated the development of the Port, initially with wooden piers and iron screw pile pier and connections to the railways. Tuticorin was declared as a minor anchorage port in 1868. Since then, there have been various developments over the years. Tuticorin became the citadel of the freedom struggle in the early 20th century. In 1906, one of the greatest freedom fighters of India, Mr. V.O. Chidambaram Pillai, launched the first *Swadeshi* ship "S.S. Gaelia" in British India. After Independence, the minor port of Tuticorin witnessed a flourishing

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trade and handled a variety of cargos meant for the neighboring countries of Sri Lanka, Maldives, etc. and the coastal regions of India. Tuticorin Port is an artificial deep-sea harbor formed with rubble mound type parallel breakwaters projecting into the sea for about 4 kms. (Length of North breakwater is 4098.66 m. Length of South breakwater is 3873.37 m, and the distance between the breakwaters is 1275m). Tuticorin Port is located strategically close to the East-West International sea routes on the South Eastern coast of India at latitude 8° 45'N and longitude 78° 13'E. Located in the Gulf of Mannar, with Sri Lanka on the South East and the large land mass of India on the West, Tuticorin port is well sheltered from the fury of storms and cyclonic winds.

ANALYSIS OF TREND AND RATIO IN TUTICORIN PORT TRUST

Various techniques are used in the analysis of financial data in order to determine whether or not the financial or operating performance, as well as the financial progress of the company is satisfactory. The objective of any analytical method is simplification and presentation of the data in a more comprehensive manner. The important techniques used in this study are;

✿ **Trend Analysis**

✿ **Ratio Analysis**

TREND ANALYSIS

Trend analysis enables the analyst to take the time dimension into account. In other words, it enables him to know whether the financial position of a firm is improving or deteriorating over the years. The significance of trend analysis of ratios lies in the fact that the analyst can know the direction of movement - that is whether the movement is favorable or unfavorable. For example, the ratio may be low as compared to the norm / standard, but the trend may be upward. On the other hand, though the present level may be satisfactory, but the trend may be a declining one. Thus, trend analysis is of great significance. Trend analysis uses an index number over a period of time. For index numbers, the base year is equal to 100 percent. Other years are measured in relation to the base year.

RATIO ANALYSIS

Ratio Analysis is a widely used tool of financial analysis. It can be used to compare the risk and return relationship of firms of different sizes; it is defined as the systematic use of a ratio to interpret the financial statements so that the strengths and weaknesses of a firm as well as its historical performance and current financial conditions can be determined. The term ratio refers to the numerical quantitative relationship between two items/ variables.

Ratio Analysis was introduced by Alexander Wall in the year 1919. He criticized the bankers for the lopsided development of the banking system owing to their decisions regarding the grant of credit based on current ratios alone. Wall pointed out that, in order to get a complete picture, it is necessary to consider the rest of the relationship in a financial statement other than that of current assets to current liabilities. Since then, ratio analysis in the real sense is in operation. The technique of ratio analysis is highly developed in U.S.A.

Ratio analysis is a powerful tool of financial analysis. A ratio is defined as, *"the indicated quotient of two mathematical expressions"* and as *"the relationship between two or more things."*

LIQUIDITY RATIOS

Liquidity ratios are used to measure the company's ability to meet its short-term obligations. It consists of comparing the short-term debts to short-term resources available to pay those debts. The liquidity of Tuticorin port trust has been examined with the help of the following important liquidity ratios.

✿ **Current Ratio** : It is the ratio of current assets to current liabilities. The term current assets means those assets, which can be easily converted into cash within a short period of one accounting year. The current liabilities mean those liabilities, which are to be paid out of current assets within one accounting year.

Hence, the relationship between the current assets and the current liabilities is very significant, and it is used to measure the short-term solvency position of the company. This ratio is calculated by using the following formula:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

As a normal rule, current assets should be twice the current liabilities as then only there will be no adverse effect on business operations. However, the emphasis is on running the business smoothly. If the concern can quickly lay its hands on additional funds, say because of an arrangement with a bank, the current ratio may be less than 2 without any damage to the company.

Table 1 reveals the value of current assets in relation to the current liabilities. For current assets, all rotating assets that are convertible into cash within one year were considered. The same procedure was applied for current liabilities i.e. liabilities payable within one year were considered. Current Ratio is a good indicator of the short-term solvency of the firm.

Table 1 : Current Ratio (₹ in lakhs)

Year	Current Assets (1)	Current Liabilities (2)	Ratio (1) / (2)
1997-98	6,671.38	1730.81	3.85
1998-99	7,657.19	1442.32	5.31
1999-2000	9,992.73	2838.6	3.52
2000-01	12,500.87	3648.98	3.43
2001-02	13,787.94	2813.35	4.90
2002-03	8,797.42	2191.77	4.01
2003-04	3990.12	2157.81	1.85
2004-05	4323.75	1742.22	2.48
2005-06	5984.31	5112.52	1.17
2006-07	9634.25	7444.11	1.29
Mean	8334.00	3112.25	3.18

The ratio (Table 1) was at its highest level of 5.31 in the year 1998-99, and was at its lowest level of 1.17 in the year 2005-06. On an average, current ratio of the concern was 3.18 times during the study period. From the analysis, it is evident that the current ratio of the concern is very sound. It indicates that the concern can meet the short-term obligations in time and have an adequate amount of working capital for the smooth running of the business activities. However, the unit may lose the profitability because of unnecessary locking up of funds in current assets.

✿ **Cash Position Ratio (Absolute Liquidity Ratio)** : It is a variation of quick ratio. When liquidity is highly restricted in

Table 2 : Cash Position Ratio (₹ in Lakhs)

Year	Cash (1)	Current Liabilities (2)	Ratio(1) / (2)
1997-98	4519.74	1730.81	2.61
1998-99	5975.92	1442.32	4.14
1999-2000	8270.49	2838.6	2.91
2000-01	9363.77	3648.98	2.57
2001-02	10169.07	2813.35	3.61
2002-03	6350.02	2191.77	2.90
2003-04	289.28	2157.81	0.13
2004-05	3504.23	1742.22	2.01
2005-06	6415.18	5112.52	1.25
2006-07	568.56	7444.11	0.08
Mean	5542.63	3112.25	2.22

terms of cash and cash equivalents, this ratio should be calculated. Liquidity ratio measures the relationship between cash and near cash items on one hand, and immediately maturing obligations on the other. The inventory and the debtors are excluded from current assets, to calculate this ratio.

Cash + Marketable Securities

$$\text{Cash Position Ratio} = \frac{\text{Cash + Marketable Securities}}{\text{Current Liabilities}}$$

Generally, a ratio of 0.75: 1 ensures liquidity. This test is a more rigorous measure of a firm's liquidity position. If the ratio is 1:1, then the firm has enough cash on hand to meet all current liabilities.

The cash position of Tuticorin Port Trust was analyzed, and the results are presented in the Table 2. This ratio indicates the extent to which the current liabilities are represented by cash and bank balances. The ratio has shown a highest level of 3.61 during the year 2001-02, and the lowest of 0.08 during the year 2006-07. On an average, the ratio of cash position of Tuticorin port trust stood at 2.22. From the analysis, it is evident that the cash position ratio of the port is very sound. It indicates that the company can meet the short-term obligations. But still, in the name of ensuring liquidity, idle funds are getting accumulated.

❖ **Activity Ratios:** The funds of creditors and owners are invested in assets to generate sales and profits. The better is the management of assets, the larger is the amount of sales. Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. These ratios are also called turnover ratios because they indicate the speed with which the assets are being converted into sales. Activity ratios involve a relationship between sales and assets. A proper balance between sales and assets generally reflects that assets are managed well. They are also called as asset-management ratios because they measure how efficiently the company employs the assets.

❖ **Inventory Turnover Ratio :** It is computed by dividing the cost of goods sold by the average inventory thus,

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

The ratio indicates how fast an inventory is sold. A high ratio is good from the view point of liquidity and vice versa. A low ratio would signify that inventory does not sell fast, stays on the shelf or in the warehouse for a long time.

Ratio of average inventory (average of opening and closing inventory) to cost of goods sold (stock turnover ratio) for the period from 1997-98 to 2006-07 is presented in Table 3. This ratio indicates how many times the stock is turned over during the year. High stock turnover ratio indicates the efficiency of the concern in which finished goods are disposed of quickly. In Tuticorin Port Trust, the ratio has been at its maximum of 5.56 times in 2006-07 and at its lowest of 1.33 times in 1998-99. The average inventory turnover ratio was 2.27 times during the study period. The inventory

Table 3 : Inventory Turn Over Ratio (₹ In Lakhs)

Year	Cost of Goods Sold (1)	Average Stock (2)	Ratio in Times (1) / (2)
1997-98	628.47	328.17	1.92
1998-99	397.66	299.71	1.33
1999-2000	395.87	267.73	1.48
2000-01	376.8	242.88	1.55
2001-02	352.52	227.17	1.55
2002-03	393.23	233.79	1.68
2003-04	493.69	212.86	2.32
2004-05	394.46	182.35	2.16
2005-06	363.43	115.61	3.14
2006-07	441.19	79.4	5.56
Mean	384.53	231.71	2.27

of TPT consists of only stores and materials as it is neither a trading concern, nor a manufacturing concern.

✿ **Total Assets Turnover Ratio** : The assets are used to generate sales or total revenue. Therefore, a company should manage its assets efficiently to maximize the sales and services. The relationship between the total earnings of the organization and the total assets is called Assets Turnover Ratio. It is calculated by the following formula :

$$\text{Total Assets Turnover Ratio} = \frac{\text{Sales or Total Earnings}}{\text{Total Assets}}$$

Table 4 evaluates the performance of total assets. TPT had the highest assets turnover at 0.25 times in 1997-98 and the lowest of 0.14 times in the year 2003-04, with an average turnover of 0.18 times for the study period. It shows that every ₹ 1 invested in total assets (on an average) earned ₹ 0.18. The higher the earning per rupee, the better is the effective utilization of assets.

Table 4 : Total Assets Turnover Ratio (₹ in Lakhs)

Year	Total Earnings (1)	Total Assets (2)	Ratio in Times (1) / (2)
1997-98	7518.99	29665.46	0.25
1998-99	8542.9	37466.2	0.23
1999-2000	9014.19	61148.02	0.15
2000-01	11456.98	68030.68	0.17
2001-02	11705.17	73925.08	0.16
2002-03	12458.89	80963.75	0.15
2003-04	12462.45	87275.77	0.14
2004-05	13778.57	76752.44	0.18
2005-06	15904.1	97986.27	0.16
2006-07	18300.62	109250.77	0.17
Mean	12114.29	72246.47	0.18

✿ **Fixed Assets Turnover Ratio** : It is also known as Sales or Total earnings to fixed assets ratio. This ratio measures the efficiency and profit earnings capacity of the firm. Higher the ratio, greater is the intensive utilization of fixed assets. Lower ratio means under-utilization of fixed assets.

Table 5 : Fixed Assets Turnover Ratio (₹ in lakhs)

Year	Total Earnings (1)	Fixed assets (2)	Ratio in Times (1) / (2)
1997-98	7518.99	15727.63	0.48
1998-99	8542.9	20705.9	0.41
1999-2000	9014.19	39847.47	0.23
2000-01	11456.98	41357.41	0.28
2001-02	11705.17	43836.15	0.27
2002-03	12458.89	47117.3	0.26
2003-04	12462.45	48347.44	0.26
2004-05	13778.57	48347.44	0.29
2005-06	15904.1	48509.85	0.33
2006-07	18300.62	48283.16	0.39
Mean	12114.29	40169.80	0.32

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{Sales or Total earnings}}{\text{Fixed Assets}}$$

Table 5 explains the analysis of net fixed assets and its performance in terms of total earnings. For net fixed assets, the total value of operating assets, excluding current assets is considered. The earnings indicate the operating income of TPT. It can be inferred from Table 5 that the performance of net fixed assets in terms of earnings has been declining over the study period. The ratio had been the highest at 0.48 times during the year 1997-98, and was at its lowest level of 0.23 times during the year 1999-2000. On an average, the fixed assets turnover ratio was 0.32 times. The higher is the number of turnovers, the better is the efficient utilization of fixed assets.

✿ **Ratio Of Inventory To Working Capital :** In order to ascertain that there is no over stocking, the ratio of inventory to working capital should be calculated. It is calculated as follows:

$$\text{Ratio of Inventory to Working Capital} = \frac{\text{Inventory}}{\text{Working Capital}}$$

Working capital is the excess of current assets over current liabilities. Increase in volume of sales requires increase in size of inventory, but from a sound financial point of view, the inventory should not exceed the amount of working capital. The desirable ratio is 1:1

Table 6 : Ratio of Inventory to Working Capital (₹ in lakhs)

Year	Stores Inventory (closing) (1)	Working Capital (2)	Ratio (1) / (2)
1997-98	323.74	4975.84	0.07
1998-99	275.68	3164.43	0.09
1999-2000	259.78	7154.71	0.04
2000-01	225.97	8851.89	0.03
2001-02	228.36	10974.59	0.02
2002-03	239.22	6605.65	0.04
2003-04	207.99	1832.31	0.11
2004-05	137.96	2581.53	0.05
2005-06	90.19	876.08	0.10
2006-07	83.66	2190.14	0.04
Mean	207.26	4920.72	0.06

The ratio of inventory to working capital of Tuticorin Port Trust and its trend for the 10 years' period of the study are shown in Table 6. This ratio inventory to working capital was the highest at 0.11 in 2003-04, and was the lowest at 0.02 in 2001-02.

The ratio shows a fluctuating trend. It can be inferred from this analysis that the Port maintained a reasonable investment in inventory and there was no over stocking. The result of statistical analysis also shows the average of this ratio as 0.06 times. The reason for the low inventory to working capital ratio is quite understandable, in that, TPT is neither a manufacturing concern, nor a trading concern. Inventory is maintained only to facilitate trading operations.

✿ **Net Working Capital Ratio :** It is the ratio of sales or total earnings to net working capital. It is calculated by dividing the sales or total earnings by net working capital. The term net working capital refers to the excess of current assets over current liabilities.

$$\text{Net Working Capital Turnover Ratio} = \frac{\text{Sales or Total Earnings}}{\text{Net Working Capital}}$$

Working capital turnover ratio indicates the velocity of the utilization of net working capital. This ratio indicates the number of times the working capital is turned over in the course of a year. This ratio measures the efficiency with which a company is using the working capital. A higher ratio indicates efficient utilization of working capital, and a low ratio indicates otherwise. Table 7 shows the net working capital ratio of the unit. Working capital turnover ratio reflects the extent to which a business is operating with a small amount of working capital in relation to sales or total earnings. The higher the ratio, the lower is the investment in working capital and greater are the profits. Table 7 reports high level of working capital turnover ratio was 18.15 in the year 2005-06, whereas, the lowest level of working capital turnover ratio was 1.07 in the year 2001-02. Average level of working capital turnover ratio was 4.84 times during the study period. This shows that the TPT makes an efficient use of working capital.

PROFITABILITY RATIOS

In accounting, the term '*profit*' refers to the excess of revenues over related costs applicable to a transaction, a group of transactions or the transactions of an operating period.

Table 7 : Net Working Capital Ratio (₹ in lakhs)

Year	Total earnings (1)	Working Capital (2)	Ratio in Times (1) / (2)
1997-98	7518.99	4975.84	1.51
1998-99	8542.9	3164.43	2.70
1999-2000	9014.19	7154.71	1.26
2000-01	11456.98	8851.89	1.29
2001-02	11705.17	10974.59	1.07
2002-03	12458.89	6605.65	1.89
2003-04	12462.45	1832.31	6.80
2004-05	13778.57	2581.53	5.34
2005-06	15904.1	876.08	18.15
2006-07	18300.62	2190.14	8.36
Mean	8004.00	4107.54	4.84

Table 8 : Return on Total Assets (₹ in lakhs)

Year	Operating Profit (1)	Total Assets (2)	Ratio in Times (1) / (2)
1997-98	3807.59	29665.46	0.13
1998-99	4078.77	37466.2	0.11
1999-2000	3789.19	61148.02	0.06
2000-01	5444.82	68030.58	0.08
2001-02	5896.30	73925.08	0.08
2002-03	6360.18	80963.75	0.08
2003-04	5983.87	87275.77	0.07
2004-05	7341.91	76752.44	0.10
2005-06	9747.19	97986.27	0.10
2006-07	11404.1	109250.77	0.10
Mean	6385.39	72246.47	0.09

The term '*profitability*' refers to the ability of a company to earn profit. It is also referred to as the '*earning power*', '*earning capacity*' or '*operating performance*' of the concerned investment. In analyzing the profitability, the profit-making ability of an organization is measured in terms of the size of the investment therein or its sales volume. In order to evaluate the profit performance and the profitability of the Tuticorin Port Trust, various profitability ratios that were calculated are as follows :

✿ **Return on Total Assets Ratio :** This ratio is also known as profit to assets ratio, as it establishes the relationship between net profits and total assets. It is calculated by dividing the operating profit by the total assets. This ratio measures an overall effectiveness in generating earnings from the available resources. It is used to assess not only a company's profitability, but also its overall asset management effectiveness.

$$\text{Return on Total Assets ratio} = \frac{\text{Operating Surplus}}{\text{Total Assets}}$$

This ratio reveals about how much is earned out of the rupee invested in Total Assets. Table 8 presents trends in the total assets invested and generation of profit over the years. During the period of the study, there had been an increase in the investment of total assets. During 1997-98, total assets were worth ₹ 29665.46 lakhs, which increased to ₹ 109250.77 lakhs in the year 2006-07. Total assets position ratio i.e. 0.13 was highest in the year 1997-98, and the lowest level of ratio i.e. 0.06 was in the year 1999-2000, with an average ratio of 0.09 times during the study period. The average of 0.09 indicates that every ₹1 invested in total assets generated an operating profit of ₹ 0.09 only. However, there was consistency in the ratio throughout the study period.

✿ **Ratio of Return on Capital Employed:** Return on Capital Employed establishes the relationship between profits and the capital employed. It is most widely used to measure the overall profitability and efficiency of the business. It is calculated by dividing the operating profit by capital employed.

$$\text{Return on Capital Employed} = \frac{\text{Operating Profit}}{\text{Capital Employed}} \times 100$$

The amount of capital employed may be computed by using the formula:

$$\text{Capital employed} = \text{Net fixed assets} + \text{Working capital}$$

Table 9 depicts the ratio of net profit to capital employed in Tuticorin Port Trust for the period from 1997-98 to 2006-07. The table also depicts the mean. The ratio determines the earning power of share capital of a firm, besides it also

Table 9 : Ratio of Return on Capital Employed (₹ in Lakhs)

Year	Operating Profit (1)	Capital employed (2)	Ratio in % (1) / (2)
1997-98	3807.59	15447.64	24.65
1998-99	4078.77	16693.07	24.43
1999-2000	3789.19	43474.63	8.72
2000-01	5444.82	45022.32	12.09
2001-02	5896.30	50101.52	11.77
2002-03	6360.18	46979.78	13.54
2003-04	5983.87	45819.55	13.06
2004-05	7341.91	45659.58	16.08
2005-06	9747.19	46841.95	20.81
2006-07	11404.1	49475.49	23.05
Mean	6385.39	40551.60	16.82

Table 10 : Trend And Growth Of Operating Income In Tuticorin Port Trust (₹ in lakhs)

Income Year	Cargo handling and storage Income	Change in %	Port and dock charges Income	Change in %	Railway workings Income	Change in %	Estate rentals Income	Change in %	Total	Change in trend %	Trend Indices	Trend Values*
1997-98	4676.16 (62.19)		2270.89 (30.20)		92.6 (1.23)		479.34 (6.38)		7518.99 (100)	0.00	100.00	7310.059
1998-99	5194.52 (60.81)	11.09	2709.59 (31.72)	19.32	118.58 (1.39)	28.06	520.21 (6.09)	8.53	8542.9 (100)	13.62	113.62	8377.666
1999-2000	4981.16 (55.26)	-4.11	2920.47 (32.40)	7.78	135.8 (1.51)	14.52	976.76 (10.84)	87.76	9014.19 (100)	19.89	119.89	9445.273
2000-01	5796.12 (50.59)	16.36	4636.73 (40.47)	58.77	153.87 (1.34)	13.31	870.26 (7.60)	-10.90	11456.98 (100)	52.37	152.37	10512.88
2001-02	5647.36 (48.25)	-2.57	4982.67 (42.57)	7.46	189.48 (1.62)	23.14	885.66 (7.57)	1.77	11705.17 (100)	55.67	155.67	11580.49
2002-03	5641.28 (45.28)	-0.11	5499.3 (44.14)	10.37	265.27 (2.13)	40.00	1053.04 (8.45)	18.90	12458.89 (100)	65.70	165.70	12648.09
2003-04	6136.32 (49.24)	8.78	5324.72 (42.73)	-3.17	189.19 (1.52)	-28.68	812.22 (6.52)	-22.87	12462.45 (100)	65.75	165.75	13715.7
2004-05	7043.42 (51.12)	14.78	5941.81 (43.12)	11.59	180.41 (1.31)	-4.64	612.93 (4.45)	-24.54	13778.57 (100)	83.25	183.25	14783.31
2005-06	8474.36 (53.28)	20.32	6691.78 (42.08)	12.62	190.1 (1.20)	5.37	547.86 (3.44)	-10.62	15904.1 (100)	111.52	211.52	15850.91
2006-07	9688.84 (52.94)	14.33	7768.87 (42.45)	16.10	276.08 (1.51)	45.23	566.83 (3.10)	3.46	18300.62 (100)	143.39	243.39	16918.52
Average	52.90		39.19		1.48		6.44		(100)			

Source: Annual reports of the port trust

Note: Figures in the brackets show the percentage of each income in total

* Yc = 7310.059+1067.607* (X) origin of x = 1997-98

Table 11: Trend And Growth Of Operating Expenditure In Tuticorin Port Trust (₹ In Lakhs)

Year	Cargo handling and storage Expenses	Change in %	Port and dock charges Expenses	Change in %	Railway workings Expenses	Change in %	Rentable Lands & Buildings Expenses	Change in %	Mgt. & Gen amenities Expenses	Change in %	Total	Change in trend %	Trend Indices	Trend Values*
1997-98	914.81 (24.65)		1192.86 (32.14)		128.97 (3.47)		259.23 (6.98)		1215.53 (32.75)		3711.4 (100)	0.00	100.00	4412.64
1998-99	998.66 (22.37)	9.17	1307.95 (29.30)	9.65	205.52 (4.60)	59.35	401.95 (9.00)	55.06	1550.05 (34.72)	27.52	4464.13 (100)	20.28	120.28	4705.14
1999-2000	1155.69 (22.12)	15.72	1559.98 (29.86)	19.27	137.46 (2.63)	-33.12	460.33 (8.81)	14.52	1911.54 (36.58)	23.32	5225 (100)	40.78	140.78	4997.64
2000-01	1194.94 (19.88)	3.40	1951.98 (32.47)	25.13	164.74 (2.74)	19.85	594.63 (9.89)	29.17	2105.87 (35.03)	10.17	6012.16 (100)	61.99	161.99	5290.14
2001-02	1089.35 (18.75)	-8.84	1979.76 (34.08)	1.42	162.64 (2.80)	-1.27	665.94 (11.46)	11.99	1911.18 (32.90)	-9.25	5808.87 (100)	56.51	156.51	5582.64
2002-03	1102.22 (18.07)	1.18	2240.44 (36.74)	13.17	157.92 (2.59)	-2.90	674.52 (11.06)	1.29	1923.61 (31.54)	0.65	6098.71 (100)	64.32	164.32	5875.14
2003-04	1113.23 (17.18)	1.00	2667.54 (41.17)	19.06	165.19 (2.55)	4.60	613.34 (9.47)	-9.07	1919.28 (29.63)	-0.23	6478.58 (100)	74.56	174.56	6167.64
2004-05	1064.87 (16.54)	-4.34	2581.19 (40.10)	-3.24	207.96 (3.23)	25.89	207.82 (3.23)	-66.12	2374.82 (36.90)	23.73	6436.66 (100)	73.43	173.43	6460.14
2005-06	1091.7 (17.73)	2.52	2437.28 (39.59)	-5.58	195.09 (3.17)	-6.19	208.9 (3.39)	0.52	2223.94 (36.12)	-6.35	6156.91 (100)	65.89	165.89	6752.64
2006-07	1081.79 (15.69)	-0.91	2900.48 (42.06)	19.00	189.5 (2.75)	-2.87	197.86 (2.87)	-5.28	2526.89 (36.64)	13.62	6896.52 (100)	85.82	185.82	7045.14
Average	19.30		35.75		3.05		7.62		34.28		(100)			

Source: Annual reports of the port trust

Note: Figures in brackets show the percentage of each expenditure in total

* Yc = 4412.64+292.5*(X) origin of X=1997-98

measures the business from equity shareholders' view. The high ratio indicates the high profitability of the firm in terms of its shareholding level. In the Port, the ratio was at its maximum 24.65% in the year 1997-98, whereas, the ratio was minimum at 8.72% in the year 1999-2000. The results show that the performance of the Port was average during the study period. The average of return on capital employed was 16.82% during the study period.

TREND AND GROWTH OF OPERATING INCOME AND OPERATING EXPENDITURE

Operating income, or operating profit, is the amount of income a company generated from its own operations; for instance, it does not include income from investments in other businesses, etc. Operating income can be used to gauge the general health of the core business of any concern.

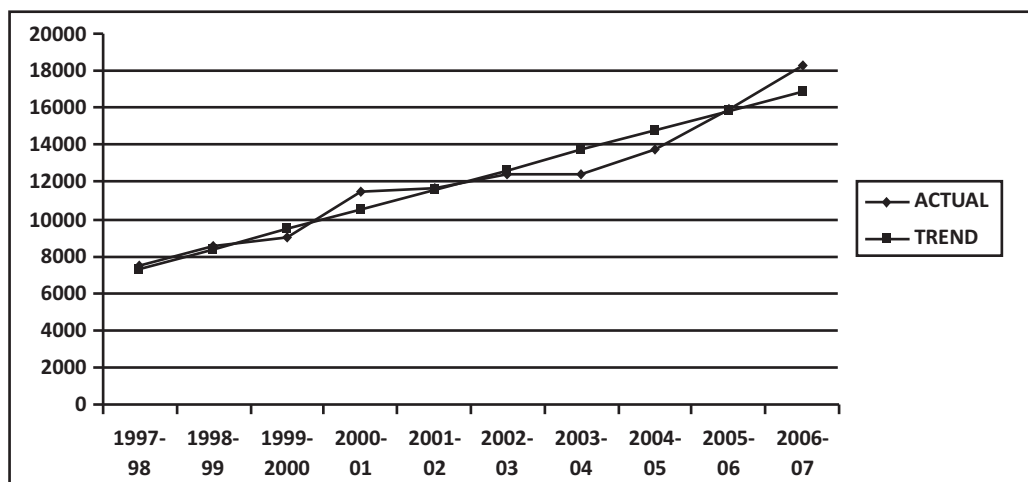
$$\text{Operating Income} = \text{Gross Profit} - \text{Operating Expenses}$$

Operating expenses are expenses that arise during the ordinary course of running a business. Operating expenses consist of salaries paid to employees, research and development costs, and other misc. charges that must be subtracted from the company's income. Any owner wants to work with managements that strive to keep operating expense as low as possible and operating income as high as possible, while not damaging the underlying business. Tables 10 and 11 show the trend and growth of operating income and operating expenditure in Tuticorin Port Trust.

Table 10 shows the year wise trend and growth of operating income of Tuticorin Port Trust. The port earns its operating income through the following sources: Cargo handling and storage, Port and Dock charges, Railway workings and Estate rentals. It is observed that the highest percentage increase in the cargo handling and storage income was 20.32 in the year 2005-06, and the highest percentage of decrease was - 4.11 in the year 1999-2000. On the other hand, operating income through port and dock charges for the whole period hit the highest percentage change of 58.77 in the year 2000-01, and the negative percentage change of -3.17 in the year 2003-04, followed by the railway workings income's highest percentage change of 45.23 in 2006-07 and the negative changes of -28.68 in the year 2003-04. Operating income through estate rentals showed the highest percentage change of 87.76 in 1999-2000 and the negative change of -24.54 for the year 2003-04. The overall year wise trend in operating income for the whole period reveals a positive trend, particularly during the last four years. Overall, during the study period, the operating income increased by 2.43 times as shown by the trend indices.

The contribution of cargo handling and storage income to total operating income was found to decline during 1997-98 to 2002-03. From 2003-04, its share in total income was found to be increasing up to 2005-06. Cargo handling and storage income on an average accounted for 53% of the total operating income. But in the case of port and dock charges, increasing trend was observed for the whole periods. This operating income contributed 40% of total operating income. On an average, estate rentals income and railway working income accounted for 6.44% and 1.48% of total operating income respectively.

Figure 1 : Operating Income Trend Line



Trend line is also fitted for the total operating income and is given in Figure 1. The deviations were positive in the years 1997-98, 1998-99, 2000-01, 2001-02, 2005-06 and 2006-07 and negative in the years 1999-2000, 2002-03, 2003-04 and 2004-05.

Figure 2 : Operating Expenditure Trend Line

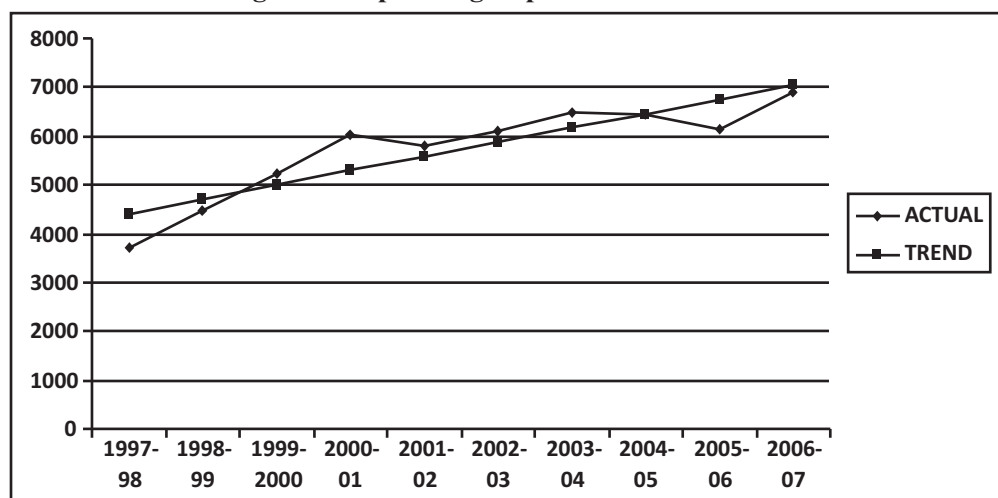


Table 11 shows the year wise trend and growth of operating expenditure in Tuticorin Port Trust. The operating expenses of the Tuticorin port trust are: Cargo handling and storage, port and dock charges, railway workings, rentable land and buildings, management and general amenities. It is observed that the highest percentage increase in cargo handling and storage expenditure was 15.72 for the period 1999-2000, and the highest decrease was -8.84 in the year 2001-02. On the other hand, operating expenses hit the highest increase in port and dock charges of 25.13 in 2000-01, and the highest decrease of -5.58 in 2005-06.

The highest percentage increase in railway workings expenditure was 59.35 for the period 1998-99 and the highest decrease of -33.12 was in 1999-2000. Another operating expense - rentable land and buildings had the highest percentage increase of 55.06 for the period of 1998-99 and the highest decrease of -66.12 in 2004-05. Management and general amenities expenditure had the highest percentage increase of 27.52 in the year 1998-99, and the highest decrease percentage of -9.25 for the period of 2001-02. The overall year wise trend analysis of operating expenditure showed an increasing trend.

The overall average of each component of the operating expenditure in the total operating expenditure in the descending order is as follows: port and dock charges expenses - 35.75%; management and general amenities expenditure - 34.28%; cargo handling and storage expenditure -19.30%; rentable lands and building expenditure - 7.62%; and railway expenditure - 3.05%.

Trend line is fitted for the above data and shown in Figure 2. The deviations were positive in the years 1999-2000, 2000-01, 2001-02, 2002-03, and 2003-04 and negative in the years 1997-98, 1998-99, 2004-05, 2005-06 and 2006-07.

❖ **Year Wise Trend Analysis Of Net Surplus :** The Tuticorin Port Trust year wise trend analysis of net surplus amount is given in Table 12. In trend analysis, percentage changes were calculated from 1997-98 to 2006-07. Trend analysis is important because it reveals the long run views. The surplus is based on the excess of total income of the TPT over its total expenditure.

Table 12 shows the year wise trend analysis of net surplus in Tuticorin Port Trust. It is observed that the highest percentage increase in net surplus was 36.95 in the year 2002-03, and the highest decrease percentage was -1.85 in 2001-02. Trend indices increased from 100 in 1997-98 to 313.08 in 2006-07. During this period, net surplus trend values increased from 2071.68 to 9178.62.

Table 12 : Trend Analysis in Net Surplus (₹ in lakhs)

Year	Total Income	Total Expenditure	Net surplus	Net Surplus		
				Decrease / increase in %	Trend Indices	Trend Values *
1997-98	8648.82	5025.09	3623.73	-	100.00	2071.68
1998-99	9593.3	5956.74	3636.56	0.35	100.35	2861.34
1999-2000	10217.47	6527.99	3689.48	1.46	101.81	3651.00
2000-01	13128.23	9389.73	3738.5	1.33	103.17	4440.66
2001-02	13158.21	9489.02	3669.19	-1.85	101.25	5230.32
2002-03	14474.05	9449.02	5025.03	36.95	138.67	6019.98
2003-04	14994.94	9428.59	5566.35	10.77	153.61	6809.64
2004-05	16334.33	9415.75	6918.58	24.29	190.92	7599.30
2005-06	18157.7	9118.7	9039	30.65	249.44	8388.96
2006-07	21173.16	9828.11	11345.05	25.51	313.08	9178.62

Source: Annual Reports of Tuticorin Port Trust

* Yc = 2071.68+789.66 (X) origin of X= 1997-98

CONCLUSION

In this paper, an attempt was made to analyze the financial performance of Tuticorin Port Trust. Financial performance of TPT was assessed by Ratio Analysis. The current ratio shows the short term solvency of the Port is comfortable. Cash position ratio gives a good indication of the short term solvency and liquidity of the port. Inventory turnover ratio on an average was 2.27 times during the study period. Assets turnover ratio shows that on an average, every ₹ 1 invested in total assets had earned ₹ 0.18. Trend analysis was also done for operating income and operating expenditure to know the long run view. Major contributors to operating income of TPT were cargo handling and storage income (53% of total operating income), followed by port and dock charges income (40%). As far as the operating expenditure is concerned, 35.75% of the total expenditure was in the form of port and dock charges followed by management and general amenities expenses of 34.28%. Overall, it may be stated that financial performance of TPT is comfortable. However, in spite of best efforts, the norms of various ratios in the context of Ports could not be obtained. Hence, the general norms were taken as criteria for appraising the financial performance.

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