

# A Trend Analysis of Working Results of Karnataka State Road Transportation Corporation from 2009-10 to 2021-22

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**Abstract:** *Transport plays a very important role in the economic development of a country and social, cultural life of the people. Transportation is the movement of the people, animals and products from one place to another place with varieties of vehicles across different infrastructural system. It enables trade between people, which is essential for the development of civilization. The Karnataka State Road Transport Corporation (KSRTC), to all intents and purposes, came into being on September 12, 1948 to cater to the transport needs of the people of Karnataka. The main objective is to study trend analysis of working results of Karnataka state road Transportation Corporation from 2009-10 to 2021-22. The present study has been conducted on the basis of secondary data and is descriptive in its nature. The required secondary data for the study was collected through different websites, annual reports of KSRTC and relevant research articles published in various journals. To make the analysis meaningful advanced statistical tools like – trend analysis was applied. The major findings are: The revenue turnover ratio has been decreased to 3.16 during 2010-11 from 3.54 of 2009-10. The expense ratio decreased to 99.16 during 2011-12 from 97.01 of 2010-11. Net profit earned during the current year is Rs.174.20 lakh as against the profit of Rs.1941.41 lakh during 2011-12. The revenue turnover ratio increased to 4.22 during 2013-14 from 3.77 of 2012-13. The expense ratio decreased to 101.36 during 2014-15 from 102.54 of 2013-14. The revenue turnover ratio decreased to 4.00 during 2015-16 from 4.09 of 2014-15. The expense ratio increased to 105.58 during 2016-17 from 98.4 of 2015-16. Net profit during the current year was Rs.450.01 lakhs as against the loss of Rs.17707.61 lakhs during 2016-17. The revenue turnover ratio deteriorated to 4.67 during 2018-19 from 4.85 of 2017-18. The expense ratio has increased to 104.16 during 2019-20 from 103.62 in 2018-19. During the current year 2020-21 the net loss is Rs.58115.03 lakhs as against the loss of Rs.15756.04 lakhs during 2019-20. During the current year 2021-22 the net loss is Rs.42330.60 lakhs as against the loss of Rs.58115.03 lakhs during 2020-21. It is suggested that, if KSRTC invest on innovative services and alternative sources of finance the firm can obtain attractive rate of returns continuously.*

**Keywords:** Working Results, KSRTC, Revenue, Expenditure, Transportation, Capital, Profit

## 1. Introduction

The roadways are the essential network of the economy for the smooth mobility of goods and the human population (Sharada, V, 1994). Roadways are the prime mode of transport and facilities to speed up the economy's advancement and expand the economy's communication (Patil, R. M.1999). Transportation is important in economic development by achieving various national goals like marketing of agricultural products, expanding trade and educational programmes (Sreenivasan, T.2005)., (Vijayan, I.2018). Transportation is the part of economic activity intended to satisfy the economic needs by means of geographic change position of people or things, an effective transportation system revolutionizes the very tenor and trend of the community's life (Uttama, K. H.2010), (Katke, S. R.2019). Finance has been rightly said to be life blood of any business. Financial analysis known as the analysis of interpretation of financial statements (Vadivelu, A, Honakeri, P. M and Kiran, B. R 2016). It refers to the process of determining the financial strength and weakness of the firm by establishing strategic relation between the items of balance sheet, profit and loss A/c (Kavitha, B. D and Seema. S. V.2017). the purpose of financial analysis is to diagnose information contained in financial statements. so as to judge the profitability and financial soundness of the firm (RaghavendraN. R.2018).

## 2. Literature Review

**Sharada V. (1994)**, The objective of this doctoral thesis is to conduct Economic study of Nationalised Road Transport in Karnataka. Both Physical and operational Performance have been studies thoroughly. the data is collected from Annual Administration Reports and also from primary day, the statistical tools such as averages and percentages were used for the analysis. A study of the working of the KSRTC indicates the existence of two wide gaps (one, the gap existing between the management and the workers internally; two, the gap existing between the Corporation and the travelling public externally) which must be bridged as early as possible.

**Sreenivasan, T. (2005)**, Materials Management Policies and Practices in Karnataka State Road Transport Corporation, A Study with a Special Reference to Bellary Division. Materials planning, purchasing, storage and inventory control, Store consumption, space consumption, Material consumption were used for study indicators. Annual administration Reports of KSRTC was used as data source, personal Interviews-Comparative analysis was used as statistical tools. It is observed that the length of lead-time was abnormal, it has also been observed that every time the purchase order is referred to the finance department, it takes its own time in finalizing the order.

**Ramanayya, T. V., (2007),** This paper deals with the differences in expectations in the level of quality of service of different categories of commuters based on the various demographic characteristics. The findings of the study are expected to help the transport operators in designing specific services with sharper focus on different commuter categories. Comfort and convenience, schedule details, crew behavior aspects, cost and other miscellaneous factors are used as study indicators. Primary data through survey, questionnaire was collected for the study, percentage analysis. One common underlying factor across all the categories of commuters appears to be that they are willing to pay higher fares for improved services. But, the improvements in the quality services required vary from category to category.

**Vadivelu, A. (2008),** The key objective is to Performance of State Owned Road Transport Corporation-A Case Study of Davangere Division. The study covers the period from the inception of Davangere division from 1992-93 onwards and it is based on primary as well as secondary data. A total of 210 commuters (transport users) at random belonging to different user's categories were interviewed across the division for the purpose of the study. the use of statistical tools like 't' test, arithmetic mean, weight score method, ranking (place) method, averages and percentages. The major findings of the present study are presented under different heads such as corporation level, inter-division comparison, commuter's perception, crews perception and comparison between private and public.

**Uttama, K. H. (2010),** The main objective is to study the performance of Karnataka State Road Transport Corporation-A Case Study of North-West Karnataka Road Transport Corporation. Administration Reports of the NWKRTC is done covering the period from 1998-99 to 2007-08. The data gathered were processed with the help of appropriate tables and interpreted with the use of statistical tools like 't' test, arithmetic mean, weight score method, ranking (place) method, averages and percentages. In order to make the study more reliable and trustworthy statistical tables, averages, graphic illustrations are used. It is found that, as all existing services were found inadequate and a few of them ill organized, resulting in growing dissatisfaction among the traveling public in some areas, the Government considered the nationalization of bus transport service as the means to ensure efficient, economical, adequate and properly co-ordinated services.

**Tiwari, S. (2011),** In his paper an attempt has been made to present a true picture of the State Road Transport Undertakings with particular reference to Haryana and the comparative financial performance analysis has been carried out. Annual reports are used as source of secondary data. The ranks were assigned for the variables such as Net Profit/Loss, Total Revenue, various operational Cost, Spares, Interest, Depreciation, Profit before Tax, Taxes for the selected time duration. Based on the ranks assigned for the variables, it is understood that, the performance on profit front is absolutely disappointing and perhaps the bureaucratic structure and management is responsible for it. Profit before tax has shown negative growth which implicates need to have stimulus package to the Haryana State Road Transport Undertaking.

**Chilumuri, S. R. (2013).** The objective of this research paper is to assess the financial performance evaluation of APSRTC and to identify the problems concluded with suggestions. Descriptive research methodology was used in the study; Secondary data was used as source of data which is collected from APSRTC annual reports. tabular analyses, comparative statements were done. The major findings of the study were that Every year the liabilities are increasing on an average of 300 to 500 crores. Total Assets are increasing considerably. Total revenue increased from Rs.3121.20 Cr to Rs.5206.26 Cr. From 2003-04 to 2009-10. Profit/Loss has negatively increased from -42.02 to -514.55 2003-04 to 2009-10.

**Renuka N, (2014),** in her study, the purpose of the study is to analysis financial performance of APSRTC on Cost revenue relationship, incidence impact on the profitability and to suggest appropriate measures for improvement in the overall financial performance. The study was primarily based on Secondary Data. Percentage tabular analysis was used for the data interpretation. The findings revealed that the corporation's revenues have been increasing continuously during the study period.

The paper published by **Singh, S. (2014)** examines changes in productivity and profitability of Uttar Pradesh State Road Transport Corporation (UPSRTC) using its annual data from 1984-85 to 2009-10. Descriptive statistical analysis was used for the study by collecting the data from the secondary data source. Index number approach (TFP and TPP) was used for the data analysis. The results revealed that, there is a significant difference in the trend between first and second half of the sample period. In the first half, productivity growth was far lower than that in the second half whereas input factor prices compared with output prices increased rapidly.

**Negi, D. and Gupta, S. K. (2017),** The objective of this paper is to study the financial performance review of Himachal road transport corporation Ltd with special reference to Shimla division. Ratio analysis was used as statistical tool in the study. The data collected from secondary sources. The major findings of the analysis are: The debt equity ratio has not maintained the standard norm during the study period, because of the higher proportions of debt and correspondingly the absence of capital contributions from the participating governments.

**Vijayan, I. (2018),** the key objective of the study is to make a comparative study of the pay scale patterns of the employees of Kerala SRTC and other Public Sector Enterprises, the data related to life span pay scale of maintenance staff and administrative staff and employees of public sector enterprises were used. The study was in exploratory research in nature. The analysis was done by using, secondary data with help of t-test, Comparative statement. The results showed that, the life span of Pay Scale for the maintenance staff's in Kerala SRTC is lower and it is higher for the administrative staffs when compared to the Govt. employees working in the same category.

This study done by **Girma, M. (2023)** examined the operators' operational and financial performance in comparison to industry standards. The ratio analysis approach was utilized to examine secondary data from 2016/17 to

2021/2022, which was employed in the study. The overall findings indicate that, despite differences in operational safety and employee productivity, the Anbessa city bus outperforms the Sheger city bus in some parameters, such as fleet utilization, vehicle usage, and service utilization. However, Sheger city bus outperforms its competitor in terms of operational safety and bus staffing levels.

**Sunil Kumar, M. S. (2020)** the objective of this doctoral thesis is to study performance of road transport corporations in India: a comparative study of state road transport corporations in Karnataka. This study is based on SRTUs' performance data available from Central Institute for Road Transport (CIRT) and Ministry of Road Transport and Highways (MoRTH) for the years 2008-2009 and 2017-2018 respectively. The indicators such as staff employed, manpower productivity, Total Effective Kms operated, fuel efficiency, tyre performance, quality of service, rate of breakdowns, rate of accidents and physical and operational performance parameters were used for the study. It is found that, Fleet utilisation which indicates the ratio of number of vehicles on the road to the total fleet held and the share of revenue earning vehicles to the total fleet was found to be 93.23% in NWKRTC on an average, followed by KSRTC (92.80%) and NEKRTC (90.24%).

**Katke, S. R. (2019)**, the objective of this research is to study Appraisal of operational performance of state road Transport Corporation a case study of North-East Karnataka Road Transport Corporation. financial indicators such as cost per KM, Margin, Gross Revenue, Capital, Fixed Assets, Total Working Expenditures, Cost were used for the study. Nonfinancial indicators such as rate of breakdowns, accidents, tyre mileage, staff ratio per schedule, schedules, gross Kms, vehicle utilization, public complaints, mileage of engine passengers carried per day, daily Kms, fleet, schedule Kms, premium services are used for the study. Secondary data, annual reports, tables charts and percentages are used as statistical tools. It is found that, CPKM of operation increased every year and growth rate for the 12 years is 272 % from 2005-06 to 2016-17. CPKM of operation depended on the effective Kms operated during the period. Increase in operation of Kms results to increase in the CPKM of Operation.

### 3. Research Problem

The development of transportation industry depends on several factors such as financial and operational performance (Hiremath, V. S, and Mangoli, R. N.2021). Out of these two, financial aspects assume a significant role in determining the growth of industry (Libera, W. P 2019). Evaluating working results of KSRTC is necessary to understand its growth tend to find out what changes to make, to achieve higher returns and if possible with less risk (Rathod, RameshL.2019). The purpose of measuring performance evaluation is not to know how the business is performing but to enable it to perform better. As there is an increasing competition from other transportation service providers, the management has to initiate appropriate steps to lower the cost of production and generation of additional revenues through trend analysis (Karnataka Evaluation Authority Report.2022). There is a

need for understanding KSRTC working results from 2009-10 to 2021-22 and taking rational decisions on capital employed, revenue, turnover, total expenditure net profit/loss before income tax, return on capital (net profit + int. charges) etc. After a thorough review of literature, it was found that many studies have been undertaken on studying financial performance of transportation industry but there is no articles or research conducted by taking the reference of working results for the specific time period. So that the present research has been undertaken and following objective have been formulated.

### 4. Research Gap

Evaluating working results of the public transport operator, namely, KSRTC have not done by any previous research scholars or authors. In the circumstances, one must examine how the entity can be transformed into a self-sustaining one by understanding its performance review. If the corporation does not analyze and predict future performance, the firm cannot run its business operations successfully. Otherwise, it may have to wind up sooner than later. Towards this end, the relevant metrics should be examined in detail. The reviewed literature would have done well to take up such an examination. It is this gap the present study proposes to bridge.

#### Objectives of the study

- 1) To study the Capital employed in KSRTC form 2009-10 to 2021-22.
- 2) To examine the Revenue turnover of KSRTC form 2009-10 to 2021-22.
- 3) To explore the Total expenditure in KSRTC form 2009-10 to 2021-22.
- 4) To ascertain Net profit/loss before Income Tax in KSRTC form 2009-10 to 2021-22.
- 5) To evaluate Return on Capital (Net Profit + Int. charges) in KSRTC form 2009-10 to 2021-22.

### 5. Research Methodology

The article has been written in the descriptive analytical in nature. The method used for the collection of the data is only secondary and observation method. The secondary data has been collected through published annual administrative reports of KSRTC from 2009-10 to 2021-22, journals, articles on the topic, magazines, books, internet and previous research paper which focused on the financial performance of KSRTC. Simple trend analysis and tabular analysis were used as statistical tools for the present study.

#### Scope of the Study

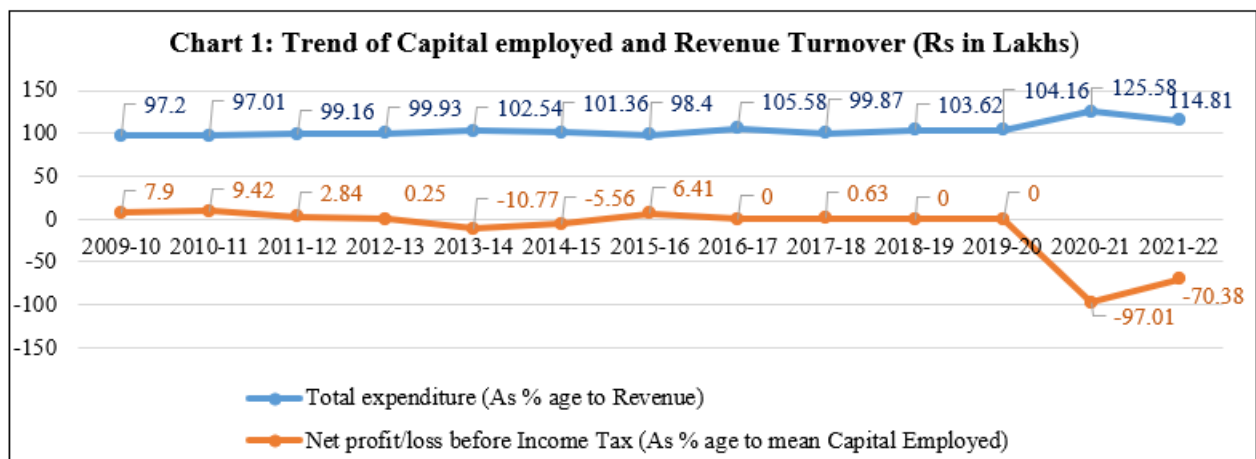
Scope of the study involves the variables such as capital employed, revenue turnover, total expenditure, net profit/loss before income tax, return on capital (net profit + int. charges) of KSRTC were covered in the present study. The study covers the data for term of 9 years between 2009-10 to 2021-22.

### 6. Data Analysis

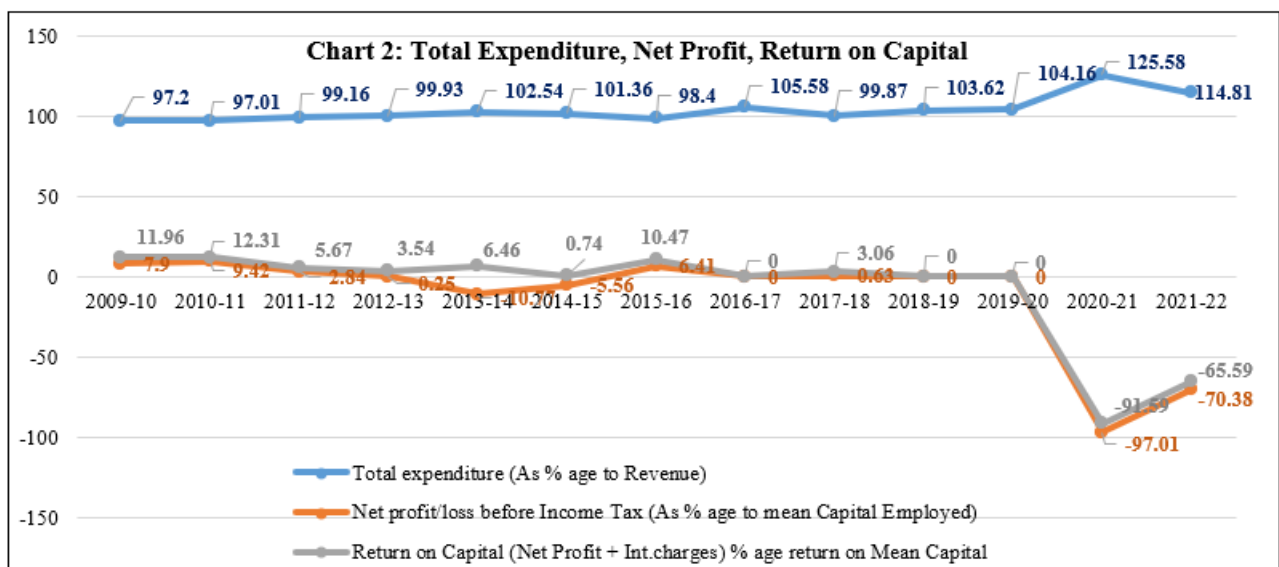
**Table 1: Working Results KSRTC from 2009-10 to 2021-22**

KSRTC Working Results	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Capital employed (Mean – Rs. in lakh)	61856	65859	68349	68596	70180	78277	79505.2	70393.4	71869	79762	81947	59905	60146
Revenue turnover (Gross)													
a). Rs. in lakh	174636	207868	231864	259233	296692	320469	317879	317351	348829	372435	81947	227191	285909
b). Ratio to mean capital	3.54	3.16	3.39	3.77	4.22	4.09	4.00	4.51	4.85	4.67	4.63	3.75	4.75
Total expenditure													
a). Rs. in lakh.	169751	201663	229922	259059	304248	324818	312784	335059	348379	385928	394856	285306	328240
b). As % age to Revenue	97.2	97.01	99.16	99.93	102.54	101.36	98.4	105.58	99.87	103.62	104.16	125.58	114.81
Net profit/loss before Income Tax													
a). Rs. in lakh.	4884.7	6205.3	1941.4	174.2	- 7555.8	4349	5095.14	- 17708	450.01	- 13493	- 15756	- 58115	- 42331
b). As % age to mean Capital Employed	7.9	9.42	2.84	0.25	- 10.77	- 5.56	6.41	0	0.63	0	0	- 97.01	- 70.38
Return on Capital (Net Profit + Int. charges)													
a). Rs. in lakh	7397.5	8109.4	3874.4	2430.9	- 4533.6	- 580.63	8327.82	- 16039	2202.3	- 11275	- 13411	- 54868	- 39693
b). % age return on Mean Capital	11.96	12.31	5.67	3.54	6.46	0.74	10.47	0	3.06	0	0	- 91.59	- 65.59

Source: Annual Administrative Reports from 2009-10 to 2021-22



Source: Annual Administrative Reports from 2009-10 to 2021 – 22





Source: Annual Administrative Reports from 2009-10 to 2021-22

## 7. Findings

The revenue turnover ratio has been decreased to 3.16 during 2010-11 from 3.54 of 2009-10. The expense ratio decreased to 97.01 during 2010-11 from 97.20 of 2009-10. Net profit during the current year is Rs.6205.3 lakh as against the profit of Rs.4884.69 lakh during 2009-10.

The revenue turnover ratio has been increased to 3.39 during 2011-12 from 3.16 of 2010-11. The expense ratio decreased to 99.16 during 2011-12 from 97.01 of 2010-11. Net profit earned during the current year is Rs.1941.41 lakh as against the profit of Rs.6205.26 lakh during 2010-11.

The revenue turnover ratio has been increased to 3.77 during 2012-13 from 3.39 of 2011-12. The expense ratio increased to 99.93 during 2012-13 from 99.16 of 2011-12. Net profit earned during the current year is Rs.174.20 lakh as against the profit of Rs.1941.41 lakh during 2011-12.

The revenue turnover ratio increased to 4.22 during 2013-14 from 3.77 of 2012-13. The expense ratio increased to 102.54 during 2013-14 from 99.93 of 2012-13. Net losses during the current year was Rs.7555.79 lakh as against the profit of Rs.174.20 lakh during 2012-13.

The revenue turnover ratio decreased to 4.09 during 2014-15 from 4.22 of 2013-14. The expense ratio decreased to 101.36 during 2014-15 from 102.54 of 2013-14. Net losses during the current year was reduced to Rs.4349.01 lakhs as against the losses Rs.7555.79 lakhs during 2013-14.

The revenue turnover ratio decreased to 4.00 during 2015-16 from 4.09 of 2014-15. The expense ratio decreased to 98.40 during 2015-16 from 101.36 of 2014-15. Net profit during the current year was Rs.5095.14 lakhs as against the losses of Rs.4349.01 during 2014-15.

The revenue turnover ratio increased to 4.51 during 2016-17 from 4.00 of 2015-16. The expense ratio increased to 105.58 during 2016-17 from 98.4 of 2015-16. Net loss during the current year was Rs.17708 lakhs as against the profit of Rs.5095.14 during 2015-16.

The revenue turnover ratio increased to 4.85 during 2017-18 from 4.51 of 2016-17. The expense ratio decreased to 99.87 during 2017-18 from 105.58 of 2016-17. Net profit during the current year was Rs.450.01 lakhs as against the loss of Rs.17707.61 lakhs during 2016-17.

The revenue turnover ratio deteriorated to 4.67 during 2018-19 from 4.85 of 2017-18. The expense ratio increased to 103.62 during 2018-19 from 99.87 of 2017-18. Net loss during the current year was Rs.13493.16 lakhs as against the profit of Rs.450.01 lakhs during 2017-18.

The revenue turnover ratio of 4.63 during 2019-20. The expense ratio has increased to 104.16 during 2019-20 from 103.62 in 2018-19 and during the current year 2019-20 the net loss is Rs.15756.04 lakhs as against the loss of Rs.13493.15 lakhs during 2018-19.

The revenue turnover ratio increased to 4.63 during 2019-20 and it is reduced to 3.75 during 2020-21. The expense ratio has increased to 125.58 during 2020-21 from 104.16 in 2019-20. and during the current year 2020-21 the net loss is Rs.58115.03 lakhs as against the loss of Rs.15756.04 lakhs during 2019-20.

The revenue turnover ratio was 3.79 during 2020-21 and it is increased to 4.75 during 2021-22. The expense ratio has reduced to 114.81 during 2021-22 from 125.58 in 2020-21. and during the current year 2021-22 the net loss is Rs.42330.60 lakhs as against the loss of Rs.58115.03 lakhs during 2020-21.

## 8. Suggestions

- 1) Traffic revenue such as passenger fare, passenger luggage, contract services, revenue from travel concession, fines collected, postal mail service need be revised.
- 2) Other Revenue such as Advertisement, Non-traffic revenue, Commercial establishment, financial income, from sale of scrap, Sale of land from subsidy should be recorded and must be placed to top level management to take strategic decisions to enhance the revenue.
- 3) An analysis of the total working expenditure under major heads both in the actual and in terms of rate per km, with percentage break-up has to be reviewed periodically.
- 4) Investing capital on purchasing electric vehicles may enhance the revenue on mean capital.
- 5) There should be more focus should be there on enhancing revenue turnover ratio rather than other ratios.

## 9. Limitations of the study

The study is based on secondary data, the data were collected from the financial reports of Karnataka State Road Transportation Corporation and the analyses were done on the basis of the data available in KSRTC annual administrative reports. Therefore, accuracy is based on the data provided in annual reports which may be subjected to window dressing, so the results may not be accurate. Majority of the factors related to the study variables are extracted from literature review. The period of study is confined to 2009-10 to 2021-22 so that, previous to this period in-depth study was ignored. To have a better analysis it is advisable to base the study on the monthly or quarterly operational data of the organization. Data of this type are not available for outsiders. So, the study has to bare these limitations.

## 10. Directions for the Future Research

The present study deals with trend analysis of KSRTC with support of literature review and annual administrative reports. Future research can be conducted by making use of advanced statistical tools to arrive at exact results related to financial performance of KSRTC. Comparative financial performance can be studied among public and Private Sector Transportation Corporation. Trend analysis was the primary tool for studying financial performance of an KSRTC. By using annual reports of other companies one can analyze the

financial performance. Comparative analysis related to working results can be done between BMTC and KSRTC as a direction for the future research.

## 11. Conclusions

An attempt is made to evaluate the working results of Karnataka SRTC using annual administrative reports from 2009-10 to 2021-22, specially focus on revenue turnover ratio, expense ratio, Net profit and other financial parameters. KSRTC Working results are concerned with; capital employed (mean) (revenue turnover, ratio to mean capital, total expenditure, percentage to revenue net profit/loss before income tax, percentage to mean capital employed return on capital (net profit + int. charges) and percentage of return on mean capital. The results found that, the revenue turnover ratio has been decreased to 3.16 during 2010-11 from 3.54 of 2009-10. The expense ratio decreased to 99.16 during 2011-12 from 97.01 of 2010-11. Net profit earned during the current year is Rs.174.20 lakh as against the profit of Rs.1941.41 lakh during 2011-12. The revenue turnover ratio increased to 4.22 during 2013-14 from 3.77 of 2012-13. The expense ratio decreased to 101.36 during 2014-15 from 102.54 of 2013-14. The revenue turnover ratio decreased to 4.00 during 2015-16 from 4.09 of 2014-15. The expense ratio increased to 105.58 during 2016-17 from 98.4 of 2015-16. Net profit during the current year was Rs.450.01 lakhs as against the loss of Rs.17707.61 lakhs during 2016-17. The revenue turnover ratio deteriorated to 4.67 during 2018-19 from 4.85 of 2017-18. The expense ratio has increased to 104.16 during 2019-20 from 103.62 in 2018-19. During the current year 2020-21 the net loss is Rs.58115.03 lakhs as against the loss of Rs.15756.04 lakhs during 2019-20. During the current year 2021-22 the net loss is Rs.42330.60 lakhs as against the loss of Rs.58115.03 lakhs during 2020-21. It is suggested that, if KSRTC invest on innovative services and alternative sources of finance the firm can obtain attractive rate of returns continuously.

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