Liquidity Analysis Of Chandigarh Transport Undertaking (CTU)

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Abstract

Transport plays a vital role in overall growth of the economy. It helps in promoting the development and serves as a motor in accelerating the progress of the nation. Road transport is the basic and important requirement for the movement of people as well as goods. Anefficient and organized road network hastens the economic advancement of the country which serves as a strong industrial base for the success of whole economy. Bus transport service is basically provided by STUs. In Chandigarh bus transport is provided by Chandigarh Transport Undertaking (CTU) . This study is confined to the liquidity analysis of Chandigarh Transport Undertaking (CTU) concluded with findings and suggestions.

Keywords: *Working capital, trend, components, ratio.*

Introduction

Chandigarh 'The City Beautiful' is the best planned city. Public bus service in Chandigarh is provided by Chandigarh Transport Undertaking (CTU) which provides local and as well as inter-state transport service. Chandigarh Transport Undertaking came into existence on 1st November, 1966 with the creation of Union Territory of Chandigarh and 30 buses were transferred from Punjab to Chandigarh Administration. In Chandigarh the roads intersect at right angles which forms gridiron network for movement. This exclusive feature in the layout plan of Chandigarh was introduced on 26th January, 2006. CTU has well connectivity of roads and it is connected to all major cities of India. Presently, CTU has a fleet of 567 buses (as on 31st march, 2018). It is having four depots, four workshops and 2421 employees (as on 31th March,2018).

Review of literature

Many research studies have been conducted from time to time on transport sector as this sector is very vital for the economy. Trivedi Shilpa (2010), in her study analyzed financial performance of Gujarat State Road Transport

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Corporation (GSRTC). In order to review the financial performance of GSRTC four parameters are considered i.e.; working capital analysis, financial structure analysis, activity analysis, profitability analysis. Working capital analysis shows that there is negative working capital during the period of study. The financial structure analysis indicates that the financial position of GSRTC is not good. Activity analysis shows that GSRTC lacks proper growth in terms of passengers travelled and revenue realized. Machhi Hetal (2011), in his study analyzed financial performanceof Gujarat State Road Transport Corporation (GSRTC). The study is conducted for a period of seven years i.e. 2002-2009.The ratios used are current ratio, solvency ratios, profitability ratios etc. was used. Various non financial parameters are also used in the study. The study revealed that GRTC has not earned any profits rather it has undergone losses. The current ratio was not found to be satisfactory during the study period. Chilumuri Srinivasa (2013), focus on the financial performance of APSRTC. The period of study is from 2003-04 to 2008-09.The study reveals that total liabilities and total assets has increased during the period. There is increase in traffic and as well as non-traffic revenue but the increase in expenditure is more than the revenue. Hence, the financial performance of the corporation is not considered to be satisfactory. Chalam (2015), in his study reviews the financial performance of Andhra Pradesh State Road Transport Corporation (APSRTC). The study period is conducted for a period of ten years from 2002-03 to 2011-12. The various parameters used for the purpose of study are working capital analysis, capital structure analysis and profitability analysis. The analysis revealed that working capital is negative in all the years except the year 2011-12. Both current ratio and quick ratio are below the standard norm. Capital structure analysis reveals that debt-equity ratio is high and interest coverage ratio is also negative during the study period. Profitability position is also not good as the corporation has incurred losses during the study period. Raman (2017), in his thesis focuses on working capital management of five State Transport Undertakings (STUs) namely Andhra Pradesh State Road Transport Undertaking (APSRTC), Gujarat State Road Transport Undertaking (GSRTC), Kerala State Road Transport Undertaking (Kerala SRTC), Maharashtra State Road Transport Undertaking (MSRTC) and Karnataka State Road Transport Undertaking (Karnataka SRTC). Data pertaining to ten years has been taken for the purpose of study. Current assets and current liabilities have been grouped on uniform basis for meaningful comparisons. The study depicted that net working capital was positive in all years in respect of APSRTC, Karnataka SRTC and MSRTC and negative in case of GSRTC and Kerala SRTC for last five and seven years.

Research Methodology

For the purpose of the study the data has been collected from various secondary sources like research journals, annual reports of CTU, newspapers, manuals and CTU websites. Further the data has been properly classified, tabulated and various ratios have been calculated for the purpose of analysis. The study period is conducted for five years from 2012-2013 to 2016-2017.

Objectives of the Study

1. To study the working capital position of CTU.
2. To study the liquidity position of CTU

through current ratio and liquid ratio.

3. To offer suggestions and ways to improve the operations of the undertaking.

Meaning of Working Capital

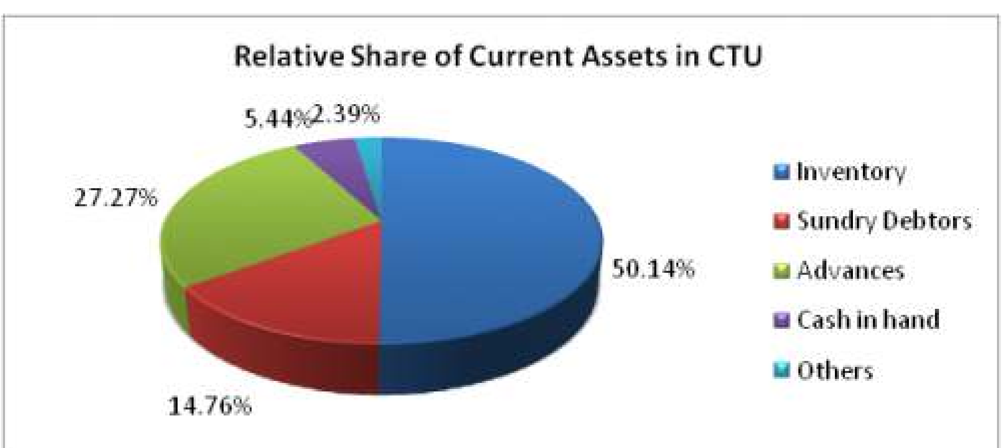
Working capital is a financial metric which measures the company's liquidity, and its overall short term financial health. Investment in current assets such as stock, debtors, bank balance etc is termed as working capital. Current assets are so called because they can be converted into cash within short span of time. Net working capital is calculated by

Table 1.1: Current Assets (In Lakhs Rs)

Particulars	Inventory	Sundry Debtors	Advance to supplier	Cash in hand	Others	Total (current Assets)
2012-13	621.41	162.37	435.62	62.81	60.59	1342.8
2013-14	624.94	150.98	536.1	66.63	17.69	1396.34
2014-15	544.72	258.30	570.93	79.74	16.06	1469.75
2015-16	560.70	165.88	83.83	79.74	26.15	916.3
2016-17	676.66	154.46	21.15	38.54	24.26	915.07
Total (% to total Current Assets)	3028.43 (50.14)	891.99 (14.76)	1647.63 (27.27)	327.46 (5.44)	144.75 (2.39)	6040.26 (100)
Average	605.686	178.39	329.52	65.49	28.95	1208.05
S.D	53.375	45.06	258.68	16.88	18.19	270.67
C.V %	8.81	25.26	78.50	25.78	62.84	22.40

Source: Annual reports of CTU.
Note: Figures in parenthesis represents relative share of current assets in CTU.

Chart 1.1: Relative Share of Current Assets in CTU



deducting current liabilities from current assets. If entity current assets are more than current liabilities then it is termed as positive working capital and vice-versa. Positive working capital is very desirable for the company as it indicates that the concern is able to meet its short term business obligations in time whereas negative working capital can create liquidity issues for the organization.

Working Capital Analysis in CTU

Working capital analysis in CTU will depict the quantum of current assets, current liabilities, trend in current assets and current liabilities; henceforth overall trend in working capital. Liquidity analysis will be done through the calculation of current ratio and liquid ratio which will represent the short term financial position of CTU.

Current Asset Analysis

In CTU current assets comprise of inventories, advances, debtors, cash in hand, and other current assets which includes prepaid expense and rent recoverable. As it is clear from table 1.1 and chart 1.1that current assets increases from year 2012-13 till year 2014-15. After 2014-15 it started decreasing, the reason being mainly due to decrease in advances, debtors and cash in hand. Inventories (stock in hand, petrol and lubricants, spare parts, stationery) contribute to the highest around 50.14% of total current assets during the study period. Advances are also significant around 27.27% which are followed by sundry debtors being 14.76 %. While, rest of the components namely cash and other current assets are around 5.44 % and 2.39 % respectively.

1. The table 1.1 depicts that the average current assets are Rs 1208.05 Lakhs. During 2015-16 and 2016-17 current assets are less than the average as a result of structural breakdown. In these two years mainly there is sharp decrease in advances due to lack of enough budgets for giving advances. Thefunds received by the Chandigarh Administration were utilized for the new 170 low floor JnNURM buses thus making a total of 270 buses under such scheme.
2. Advances are mainly given to IOC (IndianOil Corporation) for the purchase of diesel and to suppliers/ firms for the purchase of spare-parts.
3. Debtors mainly include Pepsu, Haryana, Punjab and Himachal roadways that purchase spare parts from CTU. During the year 2015-16 and 2016-17 there was decrease in debtors on account of payment received by them.
4. Cash in hand in CTU reflects the revenue receipt on account of sale of tickets. Cash is deposited everyday in the bank. Cash in hand has decreased in the year 2016-17 on account of deposit of cash in the bank and it reflects the remaining cash which has not been deposited in the bank.
5. The co-efficient of variation is 22.40% which indicates that there is 22.40% dispersion in total current assets.

Current Liabilities Analysis

Current liabilities position in CTU is reflected by table 1.2 and chart 1.2. The major components of current liabilities are outstanding liabilities (payment of spare-parts, salaries, overtime, audit fees and passenger tax). The table shows that current liabilities are increasing from the year 2012-13 till year 2014-2015. During the years 2015-16 and 2016-17 on account of decrease in outstanding liabilities and passenger tax total current liabilities started decreasing. During the study period the major contribution is from outstanding liabilities which is around 98.78% while passenger tax contributes negligible that is around 1.21% of total current liabilities.

1. The table 1.2 depicts that average current liabilities are Rs 2934.72 lakhs which are more than the average current assets.

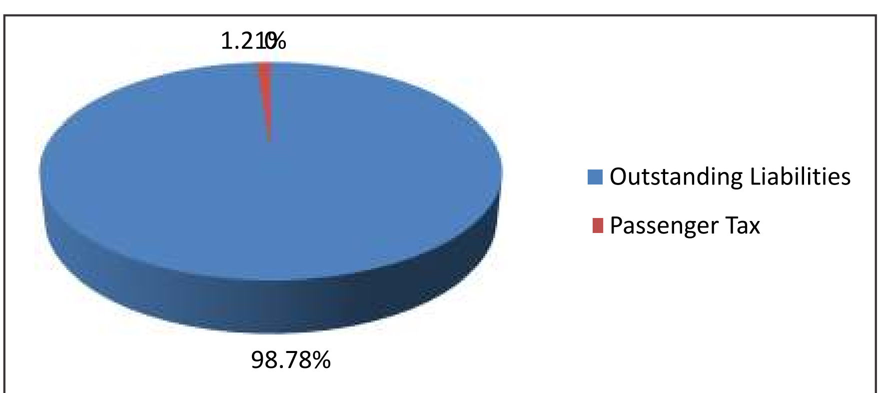
Table 1.2: Current Liabilities ((In Lakhs Rs)

Particulars	Outstanding Liabilities	Passenger Tax	Total (Current Liabilities)
2012 - 13	1851.26	21.07	1872.33
2013 - 14	3006.34	37.60	3043.94
2014 - 15	3865.06	54.84	3919.9
2015 - 16	3434.33	39.46	3473.79
2016 - 17	2338.18	25.50	2363.68
Total(% to total Current Liabilities)	14495.17 (98.78)	178.47 (1.21)	14673.64 (100)
Average	2899.034	35.694	2934.728
S.D.	812.96	13.24	825.81
C.V %	28.04	37.11	28.13

Source: Annual reports of CTU.

Note: Figures in parenthesis represents relative share of current assets in CTU.

Chart 1.2: Relative Share of Current Liabilities in CTU



Outstanding liabilities have decreased during the year 2015-16 and 2016-17 due to reduction in purchase of spare parts on account of lack of surplus funds received from Chandigarh administration.

2. Passenger tax has also reduced due to the reason that CTU has reduced its buses on long routes.

3. The variation in total current liabilities is 28.13% depicting that there is less consistency in total current liabilities as compared to total current assets.

Current Assets / Current Liabilities Overall Trend Analysis

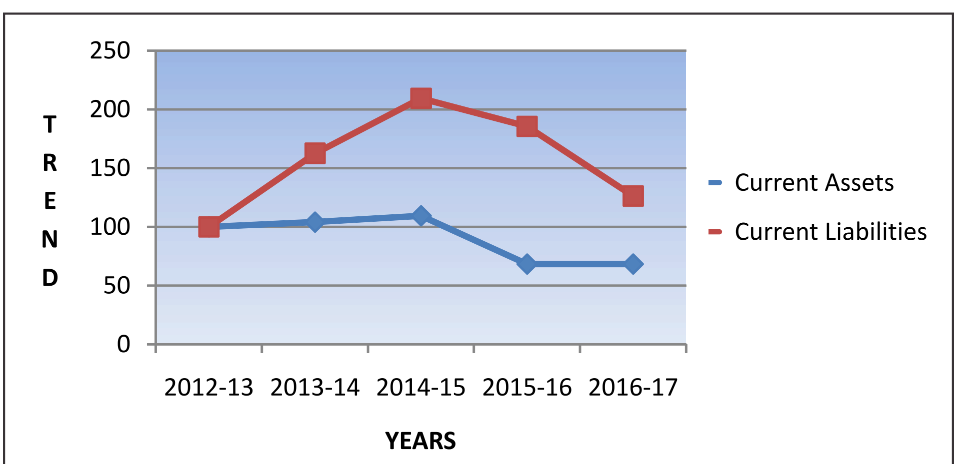
Table 1.3 and Chart 1.3 reveal that the current assets have shown a mixed trend in CTU. It has reflected an increasing trend from the year 2012-2013 up till year 2014-15. During the years 2015-16 and 2016-17 current assets have shown a decreasing trend for the reasons already mentioned above. The trend ranged between 68.14% in 2015-16 and 109.39 % in 2014-15 with an average trend of 89.93 as depicted. During the years 2012-13, 2013-14 and 2014-15 current assets have shown a

Table 1.3: Trend (%) Current Assets / Current Liabilities (In Lakhs Rs)

Years	Current Assets Trend (%)	Current Liabilities Trend (%)
2012 - 13	100	100
2013 - 14	103.98	162.57
2014 - 15	109.39	209.35
2015 - 16	68.14	185.53
2016 - 17	68.15	126.24
Average Trend	89.93	156.74

Source: Annual reports of CTU

Chart 1.3: Current Assets/Current Liabilities Trend (%)



higher trend than the average trend. It is also depicted that during the study period trend in the current liabilities ranged between 100 % in the year 2012-13 and 209.35% in the year 2014-15 with an average trend of 156.74%. The current liabilities were higher than average trend except in the years 2012-13 and 2016-17.

Working Capital Trend Analysis

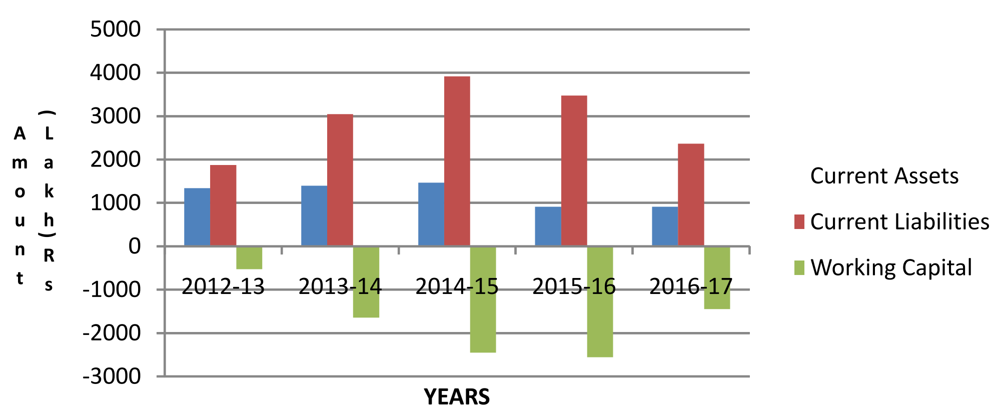
Table 1.4 and Chart 1.4 depicts the working capital position of CTU. The five year data reveals that at the end of financial year 2012-13 current assets were Rs 1342.8 lakhs which incremented by 3.98% to Rs 1396.34 lakhs in the year 2013-14, which further incremented by 5.25% in the year 2014-15 and reached to Rs 1469.75 lakhs. After 2014-15 it started decreasing and decremented by 37.73% to Rs 915.1 lakhs in the year 2015-16. In the year 2016-17 current assets were almost same as in the year 2015-16.In 2012-13 current liabilities were Rs 1872.33 lakhs which incremented by 62.57% to Rs 3043.94 lakhs in the year 2013-14 and further incremented in the year 2014-15 and recorded to Rs 3919.9 lakhs. After the year 2014-15 current liabilities started

Table 1.4: Working Capital Analysis in CTU

	Current Assets		Current Liabilities		Working Capital	
Years	Amount (Rs in lakhs)	% change Over preceding year	Amount (Rs in lakhs)	% change Over preceding year	Amount (Rs in lakhs)	% change Over preceding year
2012-13	1342.8	----------	1872.33	----------	-529.53	----------
2013-14	1396.34	3.98	3043.94	62.57	-1647.6	211.14
2014-15	1469.75	5.25	3919.9	28.77	-2450.15	48.71
2015-16	915.1	-37.73	3473.79	-11.38	-2558.69	4.42
2016-17	915.07	-0.0032	2363.68	-31.95	-1448.61	-43.38

Source: Annual reports of CTU

Chart 1.4: Current assets, Current Liabilities and Working Capital in CTU



decreasing and at the end of last year of analysis it decremented by 31.95% and stood at Rs 2363.68 lakhs respectively. During the whole study period current liabilities are more than the current assets. The difference between current liabilities and current assets is maximum in the year 2015-16 around Rs 2558.69 lakhs and minimum in the year 2012-13 that is Rs 529.53 Lakhs. Working capital is negative during majority of the years under study. During the financial year 2012-13 working capital is Rs -529.53 lakhs which followed a diminishing trend and reached Rs -2558.69 lakhs at the end of the financial year 2015-16. During the year 2016-17 working capital showed some improvement as in comparison to year 2015-16 but still it maintained negativity. As a whole it can be concluded that the negative trends in working capital indicate that current assets are not sufficient to meet its current debts timely, indicating that the corporation is not able to fulfill its short –term obligations by current assets. Hence, working capital position of CTU is unsatisfactory which signifies that liquidity position in CTU is poor.

Liquidity Ratios

Liquidity ratios are the indicator which determines whether a company's current assets are adequate to meet its near-term obligations. It is best measure which shows the financial health of the company and also tells that how quickly current assets are converted into cash in order to pay-off its short term liability on a timely basis. Hence, this ratio plays a significant role in accessing the financial standing of the company. In order to have an insight into the liquidity position of CTU current ratio and quick ratio has been computed.

Analysis of Current Ratio / Liquid Ratio

Current Ratio determines the short term liquidity position of the firm. It compares the current assets of an organization to its current liabilities. Generally the rule of thumb for current ratio is 2:1. Higher the current ratio better is the liquidity position of a concern. But too high current ratio does not always mean better signs of liquidity because it may also indicate inefficient use of current assets. So, the make-up of current assets or how the current assets are allocated is necessarily important in order to judge the financial well-being of a concern. Current ratio is calculated by the formula:

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

Table 1.5 (next page) reveals the current ratio and liquid ratio in CTU. During the study period currents assets are less than the current liabilities and hence current ratio is much less than the satisfactory norm of 2:1. Current ratio fluctuated from a maximum of 0.71 in the financial year 2012-13 to 0.26 in 2015-16. It can be seen that current ratio has decreased from 2012-13 onwards. During the year 2016-17 on account of decrease in liabilities current ratio has improved as in comparison to 2015-16 but that too far from satisfactory. It overall reflects that the short term financial position of CTU is not satisfactory.

Quick ratio is the ratio of quick assets to current liabilities. The main shortcoming of current ratio is that it includes inventory and

Table 1.5: Analysis of Current Ratio/ Liquid Ratio

Years	Current Assets (Lakhs Rs)	Liquid Assets (Lakhs Rs)	Current Liabilties (Lakhs Rs)	Current Ratio	Liquid Ratio
2012-13	1342.8	678.71	1872.33	0.71	0.36
2013-14	1396.34	771.1	3043.94	0.45	0.25
2014-15	1469.75	924.55	3919.9	0.37	0.23
2015-16	915.1	342.85	3473.79	0.26	0.09
2016-17	915.07	225.25	2363.68	0.38	0.09
Average	1208.05	588.49	2934.728	.434	0.204
S.D	270.67	294.40	825.81	0.16	0.11
C.V %	22.40	50.02	28.13	38.86	56.48

prepaid expenses. A better measure of liquidity that is quick ratio is taken instead of current ratio in order to access the liquidity position of an enterprise. Quick assets are the current assets excluding inventory and prepaid expenses. The formula to compute quick ratio is:

$$\text{Quick Ratio} = \frac{\text{Quick Assets or Liquid Assets}}{\text{Current Liabilities}}$$

During the study period quick ratio has not reached the standard norm of 1:1. It fluctuated with a maximum of 0.36 in the year 2007-08 to minimum of 0.09 in the year 2015-16 and 2016-17 with an average of .20 quick ratio.

- The data shows that there is a major share of inventory in the make -up of current assets. In the year 2012-13 current assets are Rs 1342.8 lakhs whereas quick assets are Rs 678.71 lakhs (Inventory Rs 621.41 lakhs) whereas in the year 2016-17 current assets are Rs 915.07 lakhs whereas quick assets being Rs 225.25 lakhs (Inventory increased to Rs 676.66 Lakhs).
- The concern has to maintain large amount of inventory for the maintenance and reconditioning of vehicles. This increases the quantum of current assets but do not add to near cash assets, being the major cause of inadequate quick assets and hence quick ratio. Therefore, it can be said that current liabilities are more than quick assets and CTU is not able to meet its short term obligations by the help of near cash assets.
- The table also depicts that coefficient of variation in liquid ratio is more i.e. 56.48% revealing that dispersion is more in liquid ratio than in current ratio (38.86%).

Findings and Suggestions

1. During the period of study current ratio fluctuated between 0.71 in the year 2012-13 to 0.26 in the year 2015-16. It has not reached the standard norm and hence, the fluctuating trend of current ratio indicates that the short term financial position of CTU is unsatisfactory.
2. The quick ratio also fluctuated between 0.36 in the year 2007-08 to 0.09 in the year 2016-17. It has also not reached the

standard norm during the study period. The study also depicts that the major share in current assets is of inventories. The concern has to maintain a large stock of inventories on account of spare parts, tyres, tubes and diesel for the reconditioning of buses. However, it increases the overall current assets but does not count for near cash assets available for the payment of current liabilities. Steps must be taken by the organization to strengthen its near cash assets by adding more vehicles to its fleet which will reduce the burden of carrying extra inventory, revising the fares according to the hike in diesel prices and to curtail some of its concessional and free travel facilities which are provided to students, government employees, teachers, physically handicap, freedom fighters, senior citizens etc. Moreover, training is also being provided by Indian Oil Corporation to drivers and conductors about the various ways of driving which helps to save diesel.

3. CTU should also try to improve shattered conditions of buses. All the buses should be upgraded so that there is less need of holding huge amount of spare parts. Hence it will also reduce its outstanding liabilities. Outstanding liabilities, a major part in current liabilities have increased to around 98.78% at the end of year 2014-15 due to outstanding payment to suppliers on account of spare parts, undisbursed staff salaries, overtime payments etc.
4. The cash balance in CTU is also very less which indicates that the current assets are not able to pay its current liabilities which has adversely affected its working capital. In order to improve its cash position CTU is reviewing drivers and conductors for the reasons of fewer receipts. Moreover training is also provided to the field staff in order to maintain better public dealings which will further add up to its revenue receipts.
5. Current assets are not sufficient to meet its current liabilities; hence all the disbursements are made through the budget provided by government of India.

There is no doubt that travelling in the CTU buses is better than other state-owned buses by way of maintenance, timing, cleanliness and fare. Hence, the organization should take all the necessary steps which can improve its financial position.

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Source of Data: Financial statements of CTU.