A Fresh Approach to Current Ratio with respect to airline Industry

*Dr. R.Venkatachalam CA
**Dr. P. Natarajan

Introduction

Ratios effectively condense a plenty of data and it would be easy to compare if the data are meaningfully classified and collated. Traditionally banks and financial institutions compute financial ratios to evaluate financial health of their prospective borrowers. They use ratio analysis technique on the financial statements and look at the trend in the borrowers' financial performance comparing the bench mark standards in the industry.

Normally financial institutions consider a various criteria in evaluating borrower's credit worthiness. They normally look at four different areas such as liquidity, solvency, profitability and activity. Among these liquidity is the most important aspect because it evaluates the borrower's ability to meet current liabilities with their current assets.

Under liquidity, current ratio is the most important ratio. Normally the banks and financial institutions expect the ratio should be around 1.5:1. However, what constitutes current assets and current liabilities is really a matter. In order to provide correct information to external users, financial statements of public and private companies should follow the standards prescribed by generally accepted accounting policies (GAAP) or International Financial Reporting Standards or Indian Accounting Standards as applicable. However, there is no single law or standard or authority to standardize the formulae to be used in computing financial ratios and the definition of various components being used in the ratio analysis. This is the main reason that various parties use different definitions and in computing the value of different components and use different formulae in evaluating the financial metrics.

This paper aims to highlight the anomaly in the definition of current liabilities and current assets being used in calculating current ratio in respect of airline industry.

Current Ratio

Banks give greater importance to this ratio and they normally include under covenants that they prescribe threshold current ratio at 1.33. The breach of covenant may end up with penal interest or cancellation of bank facility.

Current ratio = Current assets / Current liabilities

Current assets include assets which will be converted into cash within one year or their operating cycle. Examples are cash and its equivalents, inventories, trade receivables, investment for sales, notes receivables and prepayments, etc.   In case, a structured balance sheet is not available we have to identify which items are current assets and current liabilities.

Current liabilities include obligations to be met within one year or their operating cycle. Examples are accounts payable, expenses payable, tax due, and accrued expenses, etc.

Banks and financial institutions take these figures from the financials constructed as per IFRS or GAAP as applicable in their country.

Significance of Current Ratio

Often financial institutions rely on this ratio to extend finance or not. In case of poor current ratio, banks may be reluctant to lend expecting high credit risk on the part of the borrower. The financial institutions often place a covenant of minimum current ratio in order to safeguard them against weak financial positions. In many countries, there are restrictions in lending to potential borrowers who have current ratio below the defined limits.

Investors or prospective buyers may not be interested in the business if the current ratio is poor.

Credit Rating agencies give a significant weight to this ratio in finalizing the rating of the company.

In predicting bankruptcy, Altman Z score model gives a significant weight to working capital which has a direct relationship with current ratio.

Application of current ratio:

This ratio can be helpful for people managing the business as well as the people who do business with them. Suppliers would extend credit only if this ratio is healthy. Bankers would use this ratio to measure

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*Programme Director, Prime Academy of Management studies, UAE
**Professor, Department of Commerce, Pondicherry University

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the capacity of borrowers paying periodical interest and installments due on time. This ratio would indicate the ability of meeting the immediate commitment of the business.

Relevance of Current Ratio Metrics in manufacturing and services sector:

Manufacturing firms:

Current ratio has to be viewed considering the nature of industry in which the business is in. The components of current assets and current liabilities are varying from industry to industry.

Traditional manufacturing industries needed to have current assets like raw materials, work in progress, finished goods, trade receivables, cash, etc, and therefore they require more working capital and sufficient funding should come from long term finance and therefore it was reasonably be expected to have current ratio around 2:1.

However, with the latest technology in storing and transportation, some companies adopting Just-In-Time policy, modern manufacturing companies try to reduce the size of buffer inventory through efficient value chain thereby reducing significant inventory holding in working capital investment and hence lower current ratios.

Some business like petrol bunks who do not sell on credit and avail credit from suppliers can operate with current ratio around 1:1. Likewise, where the goods are moving fast, for example perishable products, the lower current ratio is acceptable.

In some industries, for example in retail sector market leaders Wal-Mart and Tesco, avail credit for longer periods from their suppliers whereas they sell for cash. So they operate with current ratios below 1:1. Current ratios of Wal-Mart Stores, Inc and Tesco PLC as per 2011 annual reports are 0.88 and 0.65 respectively.

Service sector firms

The firms providing services do not trade in goods and hence investment in inventory is not required. Therefore maintaining current ratio at 2:1 is not warranted. In those industries, the main components of current assets are accounts receivable and cash and cash equivalents.   The main components of current liabilities are salary payable and other accrued expenses.

In fact, we can measure the quick ratio for these companies which is almost equal to current ratio and therefore the ratio of 1:1 reasonable.

Analysis of current ratio

If the current ratio is above 1:1, then it is evident that a portion of current assets is financed by long term funds. On the other hand, if it is less than 1:1, then a portion of current liabilities is diverted to long-term assets which is not healthy.

It is to be analyzed what a company does with the short-term excess cash it generates. If this cash is parked in marketable securities or bank deposits, the current ratio of the company will continue to remain healthy, as these will still form part of numerator (as other current assets). However, if the cash is used to fund long-term uses like buying fixed assets, a low current ratio is the most likely outcome.

Companies may divert a portion of current liabilities (supplier credit) to fund long-term uses (fixed asset purchases) and this could lead to liquidity strain on the company, if the cycle is even briefly disrupted. A seasoned analyst will therefore not allow this statement to pass unquestioned.

In ratio analysis, we should not react to numbers rather we should react to situation. The situation could be formed by industry type, business model, market condition etc. The ratio indicates the parameter position and we need to apply our wisdom in evaluating whether the position is acceptable or not. Success lies in interpreting the numbers. The main purpose of financial ratio analysis is to provide guidance to users to form a reasonable opinion about the future of the business, though they cannot predict exactly. It is important to understand the purpose and significance of ratios before computing any financial ratio. Well defined components of various elements and meaningful ratio computation would identify risks in any business.

Though the ideal ratio is 2:1, this standard should change from industry to industry. If the current assets are very much liquid where no credit sales is made and no or low inventory level (example, Petrol bunks, supermarkets, air liners etc.), low current ratio around 1.2:1 is being accepted by bankers. Where the business requires a good amount of inventory and credit sales (example textile, building materials), it is expected that the current ratio should be at 1.33 or above.

In some specific industries, for example airline industry and private schools, car hire companies, the current ratio is just above 1 or sometimes below 1 caused by anomaly in computing current ratio due to various factors peculiar to those industries.

CR application in Airliners

Industrialist perspective:

The airline companies when they present their financial performance, usually the current ratio (using the traditional formula CA/CL) is below 1 and to improve the ratio they remove Current Portion of Long Term Debt from Current Liability which is acceptable. However, they omit to set off the advance ticket sales from Current liabilities as well as from Current Assets.

Financial Institutions' perspective:

The revenue received in advance is to be kept intact in cash or cash equivalent till they are recognized as income. The other current liabilities are to be met out from other current assets. Therefore the revenue received in advance is to be net off from cash and cash equivalent to extent of advance received or the cash or cash equivalent whichever is lower.

Anomaly in computation:

As far is current ratio is concerned we have been following the standard formula rigidly. This rigidity causes distorted picture in the minds of users. This may lead to wrong interpretation. This anomaly comes from two sources:

a)   Revenue received in advance
b)   Current portion of long term debt (CPLTD)

Revenue received in advance:

Following the concept of accrual accounting, the revenue received in advance is a liability.The amount received by a company has not yet earned it. It creates an obligation to deliver the related goods or services later. It continues to be a liability until the goods or services are delivered and once it is delivered the liability would be transferred to revenue account.

Table No. 1Details of Current Ratios and Adjusted Current Ratios						
	2018		2017		2016	
Airline	**CR**	**Adjusted CR***	**CR**	**Adjusted CR***	**CR**	**Adjusted CR***
Qantas Airlines	0.49	0.37	0.44	0.28	0.49	0.26
Singapore Airlines	0.76	0.62	0.91	0.87	1.05	1.07
Southwest Airlines	0.64	0.37	0.70	047	0.66	0.44
Emirates Airlines	0.84	1.08	0.73	0.98	N A	N A
Air France-KLM	0.63	0.56	0.82	1.01	0.75	0.86

*Current ratio (adjusted)

Sales revenue received in advance net off with bank balance. Current Portion of Long Term Debt and lease liabilities removed from current liabilities

Let us consider a few big airlines in the world and compute current ratio without any adjustment (Table 1). The ratio is less than 1 except for Singapore Airlines in 2016 (1.05:1).

The major component in current liabilities is ticket sales in advance. It is very much true that it is a current liability as per definition of IFRS. However, if we view from the point of view of liquidity it need not be looked as current liability. Under working capital concept, every current liability should finance creating current assets. If you look at the airline industry, the airlines keep the revenue received in advance in bank or liquid assets. Therefore when the time comes to perform, they rely on the liquid assets and if they do not perform, they would repay the amount from the liquid assets. Therefore the necessity of maintaining current assets greater than the revenue received in advance does not arise.

Another example is private schools who collect school fees in advance. The schools collect the fees in advance and as per accounting standard the entire collection cannot be considered as revenue. The fees received in advance would be treated as current liability and month by month the fees related to the month would be transferred to revenue account. Normally, the schools keep the fees received in advance in bank account or liquid assets. Every month they meet their commitments by paying amount taken from liquid assets.

So it would be rational to set off the bank balance/liquid assets such as investments for sale with the income received in advance. In this regard we have to be careful that the set off amount should be the lower of (i) the total of cash, bank balance and investments for sale and (ii) revenue received in advance.

Another advantage of this set-off is that once the cash/bank balance and liquid asset is allocated for the revenue received in advance, the remaining current assets will be compared with the remaining current liabilities. This would indicate the real financial liquidity of the company.

$$\frac{x}{y} = Z_1$$

x = Current Assets   y = Current Liabilities Z_1 = Current Ratio

When x > y, then Z_1 > 1   When x < y, then Z_1 < 1

However, when we set off the same amount from both numerator and denominator then the original ratio which is less than 1 becomes lower still and vice versa

$$\frac{x-1}{y-1} = Z_2$$

When x > y, then $Z_2 > Z_1$ When x < y, then $Z_2 < Z_1$

In view of understanding the real financial liquidity the current ratio should be calculated as follows:

$$\text{Current ratio} = \frac{Current\ assets - revenue\ received\ in\ advance}{Current\ liabilities - revenue\ received\ advance}$$

Subject to the deduction should be limited to available cash/bank balance and liquid assets.

You can observe from Table 1 and 2 that Qantas current ratio is 0.49 (less than 1) in 2018 and on setting off the ratio has further deteriorated to 0.40, whereas the current ratio of Singapore Airlines is 1.05 (greater than 1) in 2016 and on setting off the ratio has improved to 1.07.

Table No: 2 Details of components of working capital and net income											
		2018					**2017**				
Airline	**Amt**	**NI**	**CA**	**CL**	**NWC**	**RRA**	**NI**	**CA**	**CL**	**NWC**	**RRA**
Qantas Airlines	AUD Mn	980	3712	7596	-3884	3939	853	3119	7095	-3976	3744
Singapore Airlines	SGD Mn	937	3869	6493	-2624	2198	442	4546	6305	-1759	1466
Southwest Airlines	USD Mn	2465	5028	7905	-2877	4134	3488	4815	6905	-2090	3460
Emirates Airlines	AED Mn	2979	34170	40566	-6396	12349	1450	27836	38382	-10546	10878
Air France-KLM	EUR Mn	411	7796	12317	-4,521	3,548	163	9058	12054	-2996	3246

NI = Net Income   CA = Current Assets   CL= Current Liabilities   NWC = Net Working Capital   RRA = Revenue Received in Advance

Current portion of long term debt (CPLTD):

When a business borrows on long term, the instalments payable within 12 months would be classified as Current Liability as per accounting standard. This is very much acceptable in financial reporting.

However, while we analyze financial statements, the purpose of current ratio is to assess whether the business is able to meet its current liabilities from current assets. If you observe the cash conversion circle, the current assets are being converted into cash which is used to repay the liabilities which financed the current assets. The long term debt does not finance current assets but long term assets. Those debts are being repaid from the cash generated from the business. The anomaly is that a portion of long term debt is counted as current liability whereas it has not financed any current assets. The long debt is being repaid from the profit earned. Again, under accruing concept, profit accruing in the next 12 months is not counted.

Therefore current liabilities would be greater than the current assets which indicated negative working capital and thus the current ratio is less than 1. According to theory, the situation is a financial weakness and the business is illiquid. From the Table 4 and 5, you can observe that all the major airlines in various

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continents and AT & T market leader of telecommunication in USA have negative working capital but they were able to meet their current liabilities and earn profits regularly. They enjoy good credit ratings too.

To make it simple, assume a taxi driver avails loan of Rs. 600,000 repayable in 4 years with EMI pf Rs 15,000. He does not have any inventory and receivable, but 12 months EMI, that is,   Rs. 180,000 is a current liability and thus he has negative working capital. He repays every month promptly from profit earning.

Since this current portion of long term debt does not finance any current assets, it is wise to deduct from current liabilities.

Current ratio = $\dfrac{Current\,assets}{Current\,liabilities - CPLTD}$

$\dfrac{x}{y}$ = Z_1

$$x = \text{Current Assets}$$
$$y = \text{Current Liabilities}$$
$$Z_1 = \text{Current Ratio}$$

When CPLTD is deducted from current liabilities, the ratio would improve.

$\dfrac{x}{y-1}$ = Z_2

$Z_2 > Z_1$

Robust current ratio

In order to measure the liquidity properly and to ascertain whether any short term source of funds are diverted to long term use, we need to fine tune the ratio while applying for airliners or schools etc. The robust Current Ratio would be as under:

Current   Ratio   = $\dfrac{Current\,assets - revenue\,received\,in\,advance}{Current\,liabilities - revenue\,received\,advance - CPLTD}$

The set off amount of 'revenue received in advance' is restricted to the amount of cash and cash equivalent.

Net Working Capital (NWC) and Cash Conversion Cycle (CCC)

CCC is the length of time funds are tied up in working capital or the length of time between paying for working capital and collecting cash from the sale of the working capital.

When thecurrent ratio is above 1:1, then the NWC or CCC is positive. On the other hand if CR is less than 1:1 the NWC or CCC is negative. In airline industry, it is very common to have negative NWC and negative CCC. When CCC is positive, it denotes that the working capital gap which should be supported by long term finance or short term bank finance. Suppose the CCC is negative, it denotes that the long term use is supported by current assets.

Conclusion

The method of computing ratio should not be rigid. We should understand when the relationship changes the view point is getting changed. In an audited financials, it is perfectly alright to include the revenues received in advance and the current portion of long term debt under current liabilities. However, when it comes to assess the liquidity of the business, it is proper to set off the revenue received in advance with bank/cash balance and liquid assets. When calculating current liabilities, the current portion of long term debt should be excluded.

If this adjustment is made to the formula of current ratio, the real liquidity of business can be assessed. After the adjustment, the ratio should be at least equal to 1:1, if not, it is evident that the business has diverted its current source of finance to long term use, which is not healthy.

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