Cash Position and Profitability of Telecommunication Sector in Sri Lanka

By

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Research Article

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ABSTRACT

This study has analyzed cash position and profitability among listed telecommunication firms in Sri Lanka over a period from 2005 - 2011. The objective of the study was to establish the causality that exists between the profitability and cash position. This was prompted by the need to unravel the mystery on whether profits are driven by cash position or the vice versa. The study was carried out by analyzing the two firms' profit measured by return on assets and return on equity as the dependent variable and the cash position as liquidity measure in relation to the sales, total assets and current liabilities as the independent variables. Pearson correlation analysis was used to find out the relationships between these variables and regression analysis was used to find out the impact of cash position on profitability. SPSS was utilized to support the analysis and to provide a basis for the conclusions drawn. Based on the descriptive analysis, there is no big fluctuation in the cash position ratios, return on equity and return on assets among Dialog telecom plc and Sri Lanka telecom plc. Based on the correlation analysis, there is a significant relationship between cash position ratios and return on equity & assets in the Sri Lanka telecom plc. In contrast; there is no significant relationship between cash position ratios and return on equity & assets in the Dialog telecom plc in the Sri Lankan context. Further, Sri Lanka telecom plc, cash position ratios have the influence or impact on the profitability measures comparing with Dialog telecom plc in the Sri Lankan context.

Keywords: Cash position, Profitability.

INTRODUCTION

The rationale for the study stems from the belief that cash position as a liquidity measure has a relationship with the profitability. A clear understanding of the relationship between the two is required to provide a platform against which the impact of cash position on profitability can be assessed. One of the most important activities in a business is to manage its day to day cash position. Working capital is live blood of the firm likewise blood in human being (Achchuthan and Kajananthan, 2013). Cash and cash equivalents in a firm is most liquid assets. Which can be used for immediate need arising at the time in a firm? Answer is cash in the gross working capital. Likewise, excess cash in the working capital has more risk and it will be idle. The goal is to ensure that the net cash position is not negative and at the same time there is not too much excess idle cash. Ideally, a business would want its cash inflows and outflows to be equal but that is hardly the case. Since, it’s difficult to match daily cash inflows and outflows, the companies have to take additional steps to match their cash position. The person, who is responsible for managing company’s cash, will depend on information from various sources and make decisions based on this information.

Based on regular patterns of how the company collects from its customers, how it pays to its vendors, and many other factors, a company can establish an effective cash flow system. Every activity in the organization has effect on its cash position. This will involve identifying typical cash flows, the minimum cash requirements, buffer, cash flow forecast, monitoring the usage of capital, short-term investment options, and so on.

The cash flow management system will also be able to help the business in these aspects as Cash flow forecasting, managing the cash flows, maintaining optimal levels of cash and decisions to borrow/invest based on the needs. The short-term investment options include: Treasury bills, short-term agency securities, certificates of deposit, bankers acceptances, time deposits, commercial paper, money-market mutual funds, etc. Short-term borrowing options include borrowing from banks, issuing commercial paper, etc (Velnampy, 2007).
The telecommunications sector has undergone a number of changes as a result of the emergence of new technologies, the demand to keep pace with these changes has in turn meant that firms have had to invest heavily in order to remain competitive. In the case of the Sri Lankan telecommunications sector, there have been a number of significant developments that have emphasized the need for vigilance over the cash flow of firms. Profitability measures the extent to which a business generates profits from the factors of production. It is therefore the excess revenue over the firm total costs obtained by matching revenues with the expenses incurred to create those revenues, plus the gain or loss on the sale of capital assets. Profit is a source of cash flow for firms. The amount of profit made by a firm is either retained for funding future investment opportunities or distributed to shareholders as dividend. Even though the amount of profit made in a particular year by a firm does not automatically translate into exactly the same amount of cash, it is unlikely that less profitable firms would have more cash flows than highly profitable firms, all other things being equal. Therefore, profitable firms are expected to have more cash than less profitable firms.

Research Problem

Why firms hold cash? How they save? Is there an optimal level of liquid assets? What factors influence these choices? How cash position affects performance? These questions are of long standing and lie at the heart of corporate finance. Indeed, from funding day-to-day operations to financing long-run investment, internal funds represent the single most important source of financing. The companies generally want to avoid negative cash balances because the cost of borrowing funds for daily needs immediately is very expensive. Compared to this, having some additional funds invested in short-term investments is still an acceptable cost. Even while borrowing, the firms will generally borrow a little more than the immediate requirements to be safe, and invest the excess funds in short-term instruments. Maintaining proper cash position indicates that funds are confined to more liquid assets thereby making them unavailable for operational use or for investment purposes for higher returns and, thus, there is an opportunity cost associated with the maintenance of those liquid assets and this might affect the overall profitability of the firm. In other words, increasing profitability would tend to reduce firm’s liquidity and too much attention on liquidity would tend to affect the profitability (Smith, 1980). Therefore, firms should always strike to maintain a balance between conflicting objectives of liquidity and profitability. The firm’s liquidity should not be too high or too low. Excessive dependence on liquidity indicates the accumulation of idle funds that don’t fetch any profits for the firm. On the other hand, insufficient liquidity might damage the firm’s goodwill, deteriorate firm’s credit standings and that might lead to forced liquidation of firm’s assets.

Research Question

To what extent does the cash positions influence on the firms’ profitability in the Sri Lankan telecommunication sector?

Objectives

The objectives are directed towards the following;

* To identify the nature and extent of the relationship between cash position and profitability.
* To identify the impact of cash position on the profitability
* To provide appropriate recommendations for the management.

Review Of Literature

Liquidity ratios measure a business’ ability to meet the payment obligations by comparing the cash and near-cash with the payment obligations. Liquidity management is very important for every organization that means to pay current obligations on business, the payment obligations include operating and financial expenses that are short term but maturing long term debt. Liquidity ratios are used for liquidity management in every organization in the form of current ratio, quick ratio and Acid test ratio that greatly affect on profitability of organization. So, business has enough liquid assets (Cash, Bank) to meet the payment schedule by comparing the cash and near-cash with the payment obligations. Liquidity ratios work with cash and near-cash assets (together called “current” assets) of a business on one side, and the immediate payment obligations (current liabilities) on the other side. The near-cash assets mainly include receivables from customers and inventories of finished goods and raw materials. The payment obligations include dues to suppliers, operating and financial expenses that must be paid shortly and maturing installments under long-term debt. The key objective of working capital management is to maintain an optimal balance between
each of the working capital components. Business success heavily depends on the financial executives’ ability to effectively manage receivables and loans, inventory, cash balance and payables (Filbeck and Krueger, 2005). Cash management is a critical activity for companies of all sizes. Assuring that a company has sufficient funds when and where they are needed, is a constant challenge for financial managers. Firms can reduce their financing costs and/or increase the funds available for expansion projects by minimizing the amount of investment tied up in current assets. The three main motives advanced by Keynes, (1936) for holding cash offer the framework within which research works on cash holdings are based. The transaction motive for holding cash is to cater for the day to day operating activities of the firm. While the precautionary motive explains that cash is also kept by firms to meet certain unforeseen circumstances, the speculative motive says that cash could also be kept or invested in order to take advantage of the effect of perceived future fluctuations in interest rates. The reason for keeping cash together with the business cycle of the firm would influence the level of investment in working capital. Companies meet their working capital needs through the aggressive policy, conservative policy and the moderate policy. A company using the aggressive policy funds its current liabilities with minimal current assets. In other words, current liabilities far exceed its current assets. On the contrary, a company going by the conservative policy keeps more current assets as against current liabilities. The aim is to reduce their liquidity risk by having enough current assets to meet current liabilities. But moderate working capital policy is meant to adequately match current assets against current liabilities. The level of working capital requirement is influenced by the industry in which the firm operates. In working capital of the firm, cash and cash equivalents are most liquid assets. So every firm should take consideration of its position at every point in time. Cash generated through the day to day activities of the firm. Cash position depends on many factors such as creditors, debtors and etc.

The amount of cash that a company, investment fund or bank has on its books at a specific point in time. The cash position is a sign of financial strength and liquidity. In addition to cash itself, it will often take into consideration highly liquid assets such as certificates of deposit, short-term government debt and other cash equivalents. For companies, a large cash position is often a powerful signal of financial strength, while a small cash position is a potential warning sign. This is because cash is needed to fund operations and to pay off obligations. However, too large of a cash position can often signal waste, as the funds are generating very little return. Cash is used to keep the firm liquid so that it is able to pay its obligations when they fall due for payment and therefore it protects the firm from bankruptcy (Moyer, Macguigan and Kretlow, 1995). Under-investment in cash bears the danger of being unable to pay back both short-term and long-term debts when they fall due. Every business also needs adequate levels of cash to maintain day-to-day operations. For instance it needs enough to pay wages and salaries as they fall due and enough to pay creditors to ensure its supplies.

Cash management is the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time (Pandey, 2004). Efficient cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little (Ross, 2008). Implementing a Cash management system is a decision that will impact your company from top to bottom (Ed Grondahl, --). Liquidity crunch is the result of mismatched timings in cash flows. It is almost always a result of lack of dynamic plans and tools, and management attitude. Soaring profits often tend to motivate over capitalization, and vice versa up to a certain extent, when corporate fail to recognize opportunities and build cash reserves without adequate investment plans.

Creditors have significant effects on debtors’ cash position. Ozkan and Ozkan (2004) studied that as debtors make repayment to creditors a primary concern; they do not reserve unnecessary liquid assets. Creditors are reluctant to provide additional loans to debtors when the debtors already have plenty of untapped cash. In addition, if the opportunity costs of holding liquid assets are large owing to high funding costs, firms prefer to utilize the cash inflow for reimbursement rather than accumulating cash reserves. These factors imply that debt accumulation reduces untapped cash reserves. On the other hand, debtors having a high level of debt and facing severe cash management problems will increase cash reserves to avoid bankruptcy. Hoshi, Kashyap, and Shrafstein (1991) studied the effect of main banks on cash reserve levels and reveal that if they have a firm commitment to provide a minimum liquidity to client firms; the clients do not need to hold an extra amount of cash. This reduces an unnecessary amount of liquid assets if firms already have a large debt.

A firm may use its cash reserves to fund a number of alternative competitive policies such as the location of stores or plants, the construction of efficient distribution networks, advertising targeted against rivals, or even the employment of more productive workers. From a different perspective, a firm’s stock of cash can signal the possibility of aggressive behavior, thereby distorting competitors’ actions in the product market. In this study, we can view cash holdings as a preemptive device that may affect, for instance, rivals’ entry or capacity expansion decisions.

Optimum cash levels are influenced by the factors outside the preventive concept, the company must think broad and take serious operational decisions on how to utilize the profit opportunities that are available in cash flow
process. Studies of Opler, Pinkowitz, Stulz, and Williamson (1999), Mikkelson and Partch (2003), and Haushalter, Klase, and Maxwell (2006) argue that cash reserves can benefit shareholders by allowing firms to take efficient advantage of their growth prospects. Dittmar and Mahrt-Smith (2006) and Harford, Mansi, and Maxwell (2006) found that poorly governed firms tend to dissipate their cash quickly in ways that destroy firm value. In contrast, consistent with a precautionary principle, Kim, Mauer, and Sherman (1998), Opler, Pinkowitz, Stulz, and Williamson (1999), and Mikkelson and Partch (2003) documented that persistent cash holdings do not hinder profitability and do not hurt firm value. In the short term objective of the companies, the working capital management is viewed as one of the key mechanism. And also, working capital management is considered to be a vital issue in financial management decision and it has its effect on liquidity as well as on profitability of the firm. Moreover, an optimal working capital management positively contributes in creating firm value (Bagchi and Khamrui, 2012). In this context, the main responsibilities of the board in the corporate governance practices are viewed as (1) ensuring effective systems to secure integrity of information, internal control and risk management; (2) ensuring that the company’s values and standards are set with emphasis on adopting appropriate accounting policies and fostering compliance with financial regulations. The efficient management of the broader measure of liquidity, working capital, and its narrower measure, cash, are both important for a company's profitability and well being. Various studies identified the determinants of profitability (Islam and Mili, 2012, Velnampy, 2005 & 2005, 2013, Velnampy and Pratheepkanth, 2012, and Niresh and Velnampy, 2012).

Due to the"gap" in the literature on the subject of the study, this study was constructed.

CONCEPTUALIZATION

**Liquidity**

Cash position ratios

- Cash and cash equivalents/sales
- Cash and cash equivalents/Total assets
- Cash and cash equivalents/current liabilities

**Profitability**

- Return on assets
- Return on equity

![Conceptual model](https://example.com/figure-01.png)

**HYPOTHESES OF THE STUDY:**

The following hypotheses were formulated for the study.

- **H**₁: There is a significant association between cash position and Return on Assets in the Sri Lanka telecom.
- **H**₂: There is a significant association between cash position and Return on Assets in the Dialog telecom.
- **H**₃: There is a significant association between cash position and Return on Equity in the Sri Lanka telecom.
- **H**₄: There is a significant association between cash position and Return on Equity in the Dialog telecom.
- **H**₅: There is a significant impact of cash position on Return on Assets in the Sri Lanka telecom.
- **H**₆: There is a significant impact of cash position on Return on Assets in the Dialog telecom.
- **H**₇: There is a significant impact of cash position on Return on Equity in the Sri Lanka telecom.
- **H**₈: There is a significant impact of cash position on Return on Equity in the Dialog telecom.
METHODOLOGY

Data Source

The present study used secondary data for the analysis. The data utilized in this study is extracted from the income statements and balance sheets of the two telecommunication firms namely dialog telecom plc and srilanka telecom plc listed in the Colombo Stock Exchange (CSE) database. In addition to this, scholarly articles from academic journals and relevant text books were also used.

Sampling Design

Sampling design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt on selecting items for the sample (Kothari, C.R.,2004). The sample of this study is confined to the telecommunication sector consisting of 2 firms listed in the Colombo Stock Exchange (CSE). This represents 100% of the firms listed under the telecommunication sector.

Mode Of Analysis

The quantitative research approach is employed to arrive at the findings of the research study. Under which, descriptive statistics and inferential statistics were used. Descriptive statistics depict the mean, standard deviation, maximum and the minimum values for the chosen variables. It is a snapshot of the samples and their measures and shows the exact position of the data used in the study. Inferential statistics are used to draw conclusions about the reliability and generalizability of the findings. In the present study, correlation analysis is used as a tool to identify the nature and extent of the relationship between the variables under inferential statistics. Regression analysis was used to identify the impact of cash position on the profitability in the telecommunication sectors in the SriLanka.

RESEARCH MODEL

Pearson correlation analysis was carried out to identify the trade-off between cash position as liquidity measure in relation to sales, total assets and current liabilities and profitability in terms of return on assets and return on equity. Here, cash position as liquidity measure in relation to the sales, total assets and current liabilities are the independent variable and profitability is the dependent variable.

Regression models were applied to estimate the influence of independent variables. The present study considered measures such as cash position ratios in relation to sales, total assets and current liabilities as independent variables, whereas return on assets and return on equity as dependent variables. With these variables, the following equations were formulated.

In this study, Return on Assets and Return on Equity are the function of the cash position ratios in relation to current liability, sales and total assets.

\[ Y_i = \beta_0 + \beta_1 X_{1i} + \epsilon_i \]

According to the above model and hypotheses development, we can construct the new research models for the study.

\[ \text{ROA} = \beta_0 + \beta_1 \frac{CS}{CL} + \epsilon_i \]  
\[ \text{ROA} = \beta_0 + \beta_1 \frac{CS}{REV} + \epsilon_i \]  
\[ \text{ROA} = \beta_0 + \beta_1 \frac{CS}{TA} + \epsilon_i \]  
\[ \text{ROE} = \beta_0 + \beta_1 \frac{CS}{CL} + \epsilon_i \]  
\[ \text{ROE} = \beta_0 + \beta_1 \frac{CS}{REV} + \epsilon_i \]
ROE = $\beta_0 + \beta_1 \text{CS/TA} + \varepsilon_i$ ............................... (6)

RESULTS & ANALYSIS

Descriptive Statistics

Dialog telecom Plc

The descriptive statistics show that over the period under study, the criteria used for measuring profitability including return on assets and return on equity averaged 8.88 and 11.46 respectively. The coefficients of variation (standard deviation/mean) values of profitability measures were found to be higher than those of cash position measures. Thus, reveal the high volatility of profitability measures used in the study. Furthermore, the mean values cash position ratios in relation to current liabilities, sales and total assets were 0.53, 0.17 and 0.09 respectively.

Sri Lanka telecom plc

The descriptive statistics show that over the period under study, the criteria used for measuring profitability including return on assets and return on equity was 7.56 and 10.14 respectively. The coefficients of variation (standard deviation/mean) values of profitability measures were found to be higher than those of cash position measures. Thus,
reveal the high volatility of profitability measures used in the study. Furthermore, the mean values cash position ratios in relation to current liabilities, sales and total assets were 0.37, 0.14 and 0.06 respectively.

Comparison of mean values between Srilanka telecom plc and Dialog telecom plc

| Ratios     | Dialog telecom plc | Srilanka telecom plc |
|------------|--------------------|----------------------|
| CS/CL      | 0.53               | 0.37                 |
| CS/REV     | 0.17               | 0.14                 |
| CS/TA      | 0.09               | 0.06                 |
| ROA        | 8.88               | 7.56                 |
| ROE        | 11.46              | 10.14                |

Cash position in relation to current liabilities has a considerable difference between two companies but others have minor differences between two companies.

Correlation Analysis

| Variables | Dialog telecom plc Correlation matrix | Srilanka telecom plc Correlation matrix |
|-----------|----------------------------------------|----------------------------------------|
| CS/CL     | 1                                      | 1                                      |
| CS/REV    | 0.946** 0.001                          | 0.918** 0.004                          |
| CS/TA     | 0.936** 0.002                          | 0.876** 0.010                          |
| ROA       | 0.576 0.176                            | 0.809* 0.027                           |
| ROE       | 0.570 0.181                            | 0.619 0.139                            |

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

According to the correlation analysis, Dialog telecom plc has no significant association between cash position and profitability but Sri Lanka telecom plc has significant association between cash position and profitability. Correlation matrix analysis revealed that cash position in relation to current liabilities, total assets and sales of Sri Lanka telecom plc has significant association with return on assets and cash position in relation to total assets has significant association between return on equity.

Regression Analysis

| Model | Dialog telecom | Sri Lanka telecom |
|-------|----------------|-------------------|
|       | R square | T value | F value | Sig | R square | T value | F value | Sig |
| 1st   | 0.331    | 1.574   | 2.479   | 0.176 | 0.655    | 3.081   | 9.490   | 0.027 |
| 2nd   | 0.123    | 0.837   | 0.700   | 0.441 | 0.587    | 2.666   | 7.109   | 0.045 |
| 3rd   | 0.158    | 0.986   | 0.938   | 0.377 | 0.661    | 3.125   | 9.765   | 0.026 |
| 4th   | 0.325    | 1.552   | 2.409   | 0.181 | 0.383    | 1.761   | 3.102   | 0.139 |
| 5th   | 0.138    | 0.894   | 0.798   | 0.413 | 0.538    | 2.414   | 5.828   | 0.061 |
| 6th   | 0.193    | 1.094   | 1.197   | 0.324 | 0.578    | 3.037   | 9.221   | 0.029 |

(Predictors 1st CS/CL 2nd CS/REV 3rd CS/TA 1st CS/CL 2nd CS/REV 3rd CS/TA)
Based on the regression analysis, in the Sri Lanka telecom, cash position ratios in relation to current liabilities, sales and total assets have the significant impact on the return on assets. Further, the cash position ratio in relation to total assets has the significant impact on the return on equity except cash position ratios in relation to sales and current liabilities. In the Dialog telecom, cash position ratios have no significant impact on the profitability measures as return on assets and return on equity. Therefore, we can conclude that, the Sri Lanka telecom plc, cash position ratios have the influence or impact on the profitability measures comparing with Dialog telecom plc in the Sri Lankan context.

**Hypotheses Testing**

| Hypotheses | Tool     | Results     |
|------------|----------|-------------|
| H₁: There is a significant association between cash position and Return on Assets in the Sri Lanka telecom. | Correlation | Accepted |
| H₂: There is a significant association between cash position and Return on Assets in the Dialog telecom. | Correlation | Rejected |
| H₃: There is a significant association between cash position and Return on Equity in the Sri Lanka telecom. | Correlation | Partially accepted |
| H₄: There is a significant association between cash position and Return on Equity in the Dialog telecom. | Correlation | Rejected |
| H₅: There is a significant impact of cash position on Return on Assets in the Sri Lanka telecom. | Regression | Accepted |
| H₆: There is a significant impact of cash position on Return on Assets in the Dialog telecom. | Regression | Rejected |
| H₇: There is a significant impact of cash position on Return on Equity in the Sri Lanka telecom. | Regression | Partially accepted |
| H₈: There is a significant impact of cash position on Return on Equity in the Dialog telecom. | Regression | Rejected |

**CONCLUSION & RECOMMENDATION**

Based on the descriptive analysis, there is no big fluctuation in the cash position ratios, return on equity and return on assets among Dialog telecom plc and Srilanka telecom plc. Based on the correlation analysis, there is a significant relationship between cash position ratios and return on equity & assets in the Sri Lanka telecom plc. In contrast; there is no significant relationship between cash position ratios and return on equity & assets in the Dialog telecom plc in the Sri Lankan context. Further, the Sri Lanka telecom plc, cash position ratios have the influence or impact on the profitability measures comparing with Dialog telecom plc in the Sri Lankan context.

Finally, the study proffers the following recommendations:

- Company leaders have to keep more focus on cash position at any given time; whereas external users monitor cash flow statements prepared monthly or quarterly. In general, a stable cash position means the company can easily meet its current liabilities with the cash or liquid assets it has on hand. Current liabilities are debts with payments due within the next 12 months.
- In today’s challenging economic environment, the organization's ability to manage cash is critical.
- Cash management techniques that companies of any size can use to stretch their cash resources.
- The credit policies of the company should also be reviewed. There must be a policy, incorporated in the company’s corporate plan, stating what proportion of the total sales within a period should be on credit. Such a limit must take into consideration the finances of the company and other commitments. The policy must also state what volume of credit could be granted any customer within the period.
- Proper cash flow forecasting is essential to successful working capital management. Therefore the company should take into account internal and external working capital drivers and the sensitivity of those drivers to changes in the business or market should be considered.
- Having working capital as a ready source of cash will help in the context of challenging situation. The company should implement contingency plans that take a holistic view of the organization in order to minimize the adverse effects of unforeseen events and provide financial flexibility in uncertain times.
The possibility of making additional working capital investments should also be considered by the company in order to take care of any events that may affect non-operational cash requirements such as investments, ability to service debt et cetera.

LIMITATIONS & SCOPE OF FUTURE RESEARCH

The present study is confined only to the listed telecommunication firms in the telecommunication sector of Sri Lanka. Findings and conclusions were drawn with the help of secondary data. Consequently, the results may not be fully accurate. Furthermore, data representing the period of 7 years were used for the study.

This study may be very useful for the financial managers of telecommunication industry in financial policies for managing the firm’s cash position and profitability. Furthermore, there is clearly enormous scope for more research work in the present study. Therefore, I suggest the following for further research:

There are currently 287 companies listed in the Colombo Stock Exchange (CSE) under 20 sectors. The study covered only the listed telecommunication firms in the telecommunication sector. Therefore, further investigation is required to examine the relationship between cash position and profitability of firms in the different sectors.

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