Predicting Profitability Using Operating Cash Flow Based Measures

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Abstract: A large body of research has attempted to investigate the influence of cash flow factors on company performance, however none of the prior studies have examined the influence of cash flow factors using financial liquidity and flexibility measures. This study aims to predict profitability using two types of operating cash flow ratio. We find that first, greater current cash debt coverage ratio worsens return on assets. Secondly, the greater the cash debt coverage ratio, the higher the return on assets and return on equity. Further, our findings suggest that cash debt coverage ratio has more predictive ability relative to current cash debt coverage ratio on profitability. Surprisingly, it was found that both current cash debt coverage ratio and cash debt coverage ratio has no predictive ability on earnings per share. Overall, the evidence highlights the influence of financial liquidity and financial flexibility on profitability as measured by return on assets and return on equity. This study contributes to current understanding of the usefulness of operating cash flow ratios in predicting profitability.

Keywords: Cash debt coverage ratio, current cash debt coverage ratio, financial flexibility, financial liquidity, profitability

1. Introduction

Cash flow is the very important element for a company’s success or failure. Creditors examine the cash flow statement beginning by discovering net cash provided by operating activities. A large amount of this component implies that a company qualified to generate sufficient cash from operations to pay its obligations without additional borrowing (Kieso, Weygandt & Warfield, 2011). This research is concerned with the analysis of operating cash flow based measures to predict profitability of Indonesia’s basic industry and chemicals sector.

Many cash flow ratios were discussed and analyzed in prior studies for evaluating performance (eg. Ibarra, 2009; Jooste, 2006; Kirkham, 2012), however very few studies used cash flow ratios as predictor variables (eg. Bhandari & Iyer, 2013). Ibarra (2009) analyzed 16 cash flow ratios including current cash debt coverage ratio and cash debt coverage ratio as tools for evaluating financial position of the three manufacturing companies in the Philippines for the years 2004 to 2007. Four years intra company ratios were analyzed to find out if the ratios can be used to assess company performance. The findings show that cash flow ratios can be used as tools for financial analysis of the manufacturing companies, however the ratios in this study were not used as predictor variables.

A comparative study was conducted by Jooste (2006) for three years using the nine cash flow ratios including cash debt coverage ratio for United States of America (USA) and South Africa (SA) chemical, food, and electronic industries. Using operating cash flow ratios, the comparison of the USA and the SA industries reveals some similarities and some differences. Yet, the ratios were used for performance comparison only. Kirkham (2012) compared the traditional liquidity ratios and cash flow ratios of twenty five companies from telecommunications sector in Australia. The traditional ratios comprised of current ratio, quick ratio, and interest coverage ratio. From the statement of cash flows, the ratios are cash flow ratio, namely current cash debt coverage ratio according to Kieso et al. (2011), critical needs cash coverage, and cash interest coverage. The study of Kirkham (2012) provides evidence of the importance of cash flow ratios compared to the tradional liquidity ratios. The analysis shows the usefulness of the cash flow ratios in investigating company’s financial statements. Still, the cash flow ratios were not used as predictor to company performance, more specifically to predict profitability.
Selected seven predictor variables were used by Bhandari and Iyer (2013) to predict business failure in which current cash debt coverage ratio (CCDCR) is included as predictor. This ratio was used to measure firm’s liquidity. The lower this ratio, the more the likelihood of business failure. While Bhandari and Iyer (2013) used the cash flow ratios to predict firm’s failure using 50 failed firms and 50 nonfailed firms from 2008 to 2010 period, our study is to predict profitability of basic industry and chemicals subsector listed on Indonesia Stock Exchange.

This study is unique in many respects. First, the sample companies are manufacturing firms listed under basic industry and chemicals subsector on Indonesia Stock Exchange. Manufacturing industry is important for the Indonesian government since it is the largest contributors to Indonesian GDP (Public Communication Center Ministry of Industry Republic of Indonesia, 2012) due to the employment opportunities and other economic activities. Additionally, this industry represents an attractive option to foreign as well as domestic investors. Second, the two-predictor variables use operating cash flow information to measure financial liquidity and flexibility. According to Strong (2007), the figures of cash flow from operations are generally applied by security analysts as analytical tool to assess company’s earnings quality and afterwards to estimate future dividend and earnings growth. Market valuation is more a function of cash flow than earnings. Third, Amuzu (2010) asserted that cash flow ratios to predict company performance is gradually attaining prominence. This paper intends to contribute to this insight by evaluating the usefulness of cash flow ratios to predict profitability of manufacturing companies listed under basic industry and chemicals subsector on Indonesia Stock Exchange in 2013.

The remainder of this paper is organized as follows. The next section reviews the extant literature on the subject. Section three describes the methodology and data. The empirical results are presented in section four, while section five concludes the paper.

2. Literature review

2.1 Cash Flow

Cash flow is very important for a company to survive, therefore each company must control the cash flow. Creditors evaluate statement of cash flow thoroughly since they are concerned about the repayment. From the three sections of statement of cash flow, creditors will first analyze net cash flow from operating activities. A large amount of net cash flow from operating activities indicates that a company is able to generate sufficient positive cash from operations to pay its obligation (Kieso et al., 2011). Furthermore, it indicates that the company can maintain and grow its operations. On the contrary, negative or small amount of net cash flow from operations indicates that the company should seek external financing. As explained by Subramanyam and Wild (2009), it is cash that repay the obligations, replaces fixed assets, expands facilities, and pays dividends. Consequently, analyzing cash flow helps in evaluating financial liquidity, solvency, and flexibility. For that reason, this study considers the figures derived from cash flow statement to determine financial liquidity measured by current cash debt coverage ratio and financial flexibility measured by cash debt coverage ratio.

2.1.1 Current Cash Debt Coverage Ratio (CCDCR)

Cash flow ratios provide a more holistic approach to the analysis of companies’ liquidity position (Kirkham, 2012). Current cash debt coverage ratio introduced by Kieso et al. (2011) is used in this study to evaluate the liquidity of a company. Subramanyam and Wild (2009) asserted that liquidity is the proximity to cash and liabilities. CCDCR indicates the ability of a company to pay its current liabilities from operations. Besides, according to D’Amato (2010), this ratio provides more understandable result compared to the traditional liquidity ratio, since it reveals the degree of how short-term obligation is met by the cash generated from operations. The higher this ratio, the lower the level of risk.

2.1.2 Cash Debt Coverage Ratio (CDCR)

Cash debt coverage ratio is used to measure financial flexibility of a company. This ratio shows the ability of a company to settle its liabilities as they come due using net cash provided by operating activities. It reveals whether the company can still survive without
external sources of funds (Kieso et al., 2011). The higher the ratio, the more financial flexibility the company has and the less likely the company will experience financial problems in the future (Mills & Yamamura, 1998). Moreover, financial flexibility indicates the capability of a company to respond and adjust to opportunities and difficulties (Subramanyam & Wild, 2009).

2.2 Profitability

To analyze a company’s performance and to assess future financial performance, requires joint analysis, where one measure must relate to the other. Therefore, ratio analysis is the most popular tools of financial analysis. If calculated accurately and timely, financial ratios could provide important information to measure financial health status (Hsieh & Wang, 2001). Financial performance analysis is conducted to assess the efficiency and performance of management to assure that the company is operated in a reasonable way, to give sufficient earnings to its shareholders (Bhunia, Mukhutu, & Roy, 2011). Performance measurement is related to the objectives of a company. Barton, Hansen and Pownall (2010) evaluate the value of a comprehensive set of performance measures. They find out that no particular measure dominates around the world. For equity valuation, accounting researchers and standard-setters should focus on the basic aspects that investors discover most relevant.

The main source of poor company performance according to the study of Keramidou, Mimis, Fotinopoulou, and Tassis (2013) is primarily due the low profitability. Therefore, this study employed three profitability ratios (ROA, ROE, and EPS) to evaluate company performance. Profitability ratios as stated in Subramanyam and Wild (2009) serve to evaluate the periodic financial success or failure of a company.

2.2.1 Rate of Return on Assets (ROA)

ROA measures overall profitability of a company’s assets. This ratio is computed by dividing net income by average assets (Weygandt, Kimmel, & Kieso, 2013). It indicates how efficient a company utilized its assets to generate earnings (Khatab, Masood, Zaman, Saleem, and Saeed, 2011). This is the most effective measure to assess company performance by examining income statement performance and company assets to run the business. It denotes the fundamentals of company performance. This rate involves many noncurrent asset decisions that are more difficult to be interfered within the short term period (Hagel III, Brown, Samoylova, & Lui, 2013).

2.2.2 Rate of Return on Equity (ROE)

ROE measures the rate of income earned on the amount invested by shareholders. It is used to assess the profitability of the investment by shareholders (Reeve, Warren, & Duchac, 2012). It reveals the amount of net income returned as a percentage of shareholders equity. ROE measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. It is calculated as Net Income/Shareholder's Equity. de Wet and du Toit (2007) states that this rate is a popular financial performance measure to assess shareholders’ wealth.

2.2.3 Earnings per Share (EPS)

EPS is a financial measure that generally used to evaluate company performance in a given year. Investors have used this measure as an indicator to assess the stewardship and performance of company directors and managers (Jerris, n.d.). EPS measures the net income earned on each ordinary share and computed by dividing net income available to ordinary shareholders by the number of weighted-average ordinary shares outstanding for a given year. It provides a useful outlook to verify profitability (Weygandt et al., 2013). The net income to compute EPS is derived from earnings after interest, depreciation and tax. Stock brokers and investors make use of EPS in making decision about the market value of the equity share of a company (Bhatt & Sumangala, 2012).
2.3 The Importance of Cash Flow Ratios in Predicting Profitability

Numerous authors agree on the significance of cash flow for financial analysis. This study focuses on cash flow from operations in measuring financial liquidity and flexibility. According to Jooste (2006), together with traditional ratios, cash flow from operations is also important to assess company performance. A significant positive relationship of operating cash flows to corporate performance has been documented by Frank and James (2014). They examined the relationship between cash flow and company performance using six food and beverages companies listed on Nigerian Stock Exchange for the period of 2007 to 2011 to determine the interrelationships between cash flows and corporate performance. They find a significant positive relationship between operating cash flows and company performance. The increase in operating cash flows leads to increase in profits.

By utilizing liquidity measures such as current ratio and cash gap of Saudi companies, prior study of Eljelly (2004) reveals a significant negative relationship between liquidity and profitability. The results implied that although a certain level of liquidity level is desired, it could cause of lost profits as a result of holding excessive liquidity. The losses could be decreased by implementing efficient liquidity management strategies. Eyisi and Okpe (2014), employing Cash to Debt ratio by dividing Cash flow from operations by total debt and critical needs ratio by dividing cash flow from operations-interest divided by interest + current debt + dividends to measure financial liquidity. They indicate that cash basis liquidity ratio is a better indicator to measure corporate performance. This ratio offers a better insight on liquidity position of the company and provides as an excellent tool for predicting business failure. The study emphasizes the application of cash flow ratio as a better indicator for assessing company performance.

Concerning the impact of financial flexibility on the investment and performance of East Asian companies, Ayaydin, Florackis, and Ozkan (2014) found that financial flexibility is an important indicator of performance during the Asian crisis of 1997-1998. However, during the global financial crisis of 2007-2009, the result of the study suggests that financial flexibility towards investing persist but significantly less pronounced during that period. The study of Meier, Bozec, and Laurin (2013) shows that low levels of financial flexibility earned low returns during the financial crisis, and on the other hand, firms with very high level of financial flexibility did not perform very well either. At the same time, the study shows that financial flexibility has value.

Most previous studies seem to agree that cash flow information is very important in predicting company performance. For example, the earlier work of Amuzu (2010) asserts that cash flow analysis is a better performance indicator for firms that are competing in emerging markets. Eyisi and Okpe (2014) suggests that cash basis ratio is a better indicator for measuring company performance. Jooste (2006) recommends to employ cash flow data to develop a set of cash flow based ratios and combined with balance sheet dan income statement ratios to give a better understanding of company financial strengths and weaknesses. However, to the author’s knowledge there has been no research conducted by utilizing the two cash flow ratios as introduced by Kieso et al. (2011) to predict company profitability. Previous studies (see for example, Bee & Abdollahi, 2013; Bhandari & Iyer, 2013; Rujoub, Cook, & Hay, 1995) emphasize the importance of cash flow ratios to predict business failures. Akbar, Shah, and Stark (2011) investigates the value relevance of cash flow measure, however, the cash flow component is computed as cash flow from operating activities, less net interest paid, less taxes paid plus research and development. The results suggest that cash flows can have incremental value relevance relative to either earnings or funds flows.

In the light of the above theoretical and empirical discussions, we expect the following hypotheses:

\[ H1 \] The higher the level of financial liquidity measured by current cash debt coverage ratio (CCDCR), the better the profitability (ROA, ROE, EPS).

\[ H2 \] The higher the level of financial flexibility measured by cash debt coverage ratio (CDCR), the better the profitability (ROA, ROE, EPS).
3. Methodology and Data

In a cross-sectional study, we gathered data from manufacturing companies listed under basic industry and chemicals subsector on the Indonesia Stock Exchange in 2013. To be included in the sample, each company must have available all required data for the test period and outliers are determined and removed. Accordingly, from the total population of 60 companies, the final sample contains 40 companies.

To examine the predictive ability of the two operating cash flow ratios to profitability, the following multiple regression models are established:

\[
\begin{align*}
\text{ROA} &= \beta_0 + \beta_1 \text{CCDCR} + \beta_2 \text{CDCR} + \epsilon \\
\text{ROE} &= \beta_0 + \beta_1 \text{CCDCR} + \beta_2 \text{CDCR} + \epsilon \\
\text{EPS} &= \beta_0 + \beta_1 \text{CCDCR} + \beta_2 \text{CDCR} + \epsilon
\end{align*}
\] (model 1)

The regression models (1-3) are estimated separately for the total sample. Table 1 shows the variables used in our study.

Table 1

<table>
<thead>
<tr>
<th>Notation</th>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>Return on Assets</td>
<td>Net Income Average Total Assets</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on Equity</td>
<td>Net Income Average Total Stockholders’ Equity</td>
</tr>
<tr>
<td>EPS</td>
<td>Earnings per Share</td>
<td>Net Income – Preference Dividends Weighted Average of Ordinary Shares Outstanding</td>
</tr>
<tr>
<td>CCDCR</td>
<td>Current Cash Debt Coverage Ratio</td>
<td>Net Cash Provided by Operating Activities Average Current Liabilities</td>
</tr>
<tr>
<td>CDCR</td>
<td>Cash Debt Coverage Ratio</td>
<td>Net Cash Provided by Operating Activities Average Total Liabilities</td>
</tr>
</tbody>
</table>

The rationale for selecting the three measures as dependent variables and the two measures as predictor variables is as follows:

1. The three dependent variables are return on assets (ROA), return on equity (ROE), and earnings per share (EPS) to measure company profitability. ROA is used to measure the relationship of profit earned to the investment in assets required to earn profit. ROE relates to the earnings left over for equity investors as an important performance measure of shareholder value, and EPS as an indicator of a company’s profit tells an investor how much of the company’s profit belongs to each share of stock.

2. The two predictor variables are current cash debt coverage ratio (CCDCR) and cash debt coverage ratio (CDCR) according to Kieso et al. (2011) and Mills and Yamamura (1998). CCDCR measures a firm’s liquidity to assess its ability to pay short-term liabilities (Bhandari & Iyer, 2013). CDCR measures a firm’s financial flexibility. The lower CDCR, the less financial flexibility the firm has and the more likely the future problems can arise.
4. Empirical Results

Table 2 presents the results of multiple regression analysis. The first regression model of the study with ROA as dependent variable shows that the calculated value of $F$-statistic is 10.065 and the significant $F$ is at $p$-value of 0.000. This suggests that the overall model is significant and the adjusted $R^2$ of the model indicates that 31.7% of the variance in ROA can be explained by the two cash flow factor predictor variables. Turning to the significance of each predictor variable, the $p$-value suggests that both CCDCR and CDCR are important predictors of ROA. However, contrary to our hypothesis, the empirical results surprisingly show a significant negative influence of CCDCR on ROA ($\beta = -13.600, p=0.005$), suggesting that, increasing financial liquidity is associated with decrease in ROA. The higher the level of financial liquidity, the worse the profitability. An implication of this is the excessive liquidity could cause of lost profits although certain level of liquidity is expected which is quite logical. An increase in company’s liquidity ratio could be implied as inability of the management to utilize company’s assets efficiently. This is consistent with the result of Eljelly (2004). Furthermore, as expected, the result of this study indicates a statistically significant and positive influence of CDCR on ROA ($\beta = 28.075, p=0.000$). This result clearly supports our hypothesis of positive influence of CDCR on ROA, indicating that, a good level of financial flexibility increases company’s ability to generate profit as measured by ROA. The higher the level of financial flexibility, the better the profitability. This is consistent with earlier study of Ayaydin et al. (2014) who found that financial flexibility is an important indicator of performance. An increase in the level of financial flexibility asserts that the company’s ability to pay its obligations is improved and the company can still survive without external sources in responding to opportunities and difficulties.

The second regression model with ROE as dependent variable shows the calculated $F$-statistic is 4.458 and the significant $F$ is at $p$-value of 0.018. This result reveals that the overall model is significant and the adjusted $R^2$ of the model indicates that 15.1% of the variance in ROE can be explained by the two cash flow factor predictor variables. However, turning to the significance of each predictor variable, the result indicates that CCDCR does not predict ROE ($\beta = -13.029, p=0.099$). This finding was unexpected and suggests that financial liquidity has no important contribution to profitability as measured by ROE. A possible explanation is that company’s financial liquidity cannot predict return on equity because it should take into account the contribution of creditors as capital provider on company’s profit. ROE measures the rate of income earned on the amount invested by equity investors only. On the other side, as expected, the current study found that CDCR has statistically significant positive influence on ROE ($\beta = 30.147, p=0.011$). A company’s level of financial flexibility is considered an important predictor of profitability measured by return on equity. The higher the level of financial flexibility, the better the profitability. This result supports previous findings of Ayaydin et al. (2014) and Meier et al. (2013). This finding may help us to understand that the efficient financial flexibility management is necessary to avoid losses whilst holding certain level of financial flexibility. As part of robustness check, to further determine the significance of CDCR in explaining ROE, Table 3 shows the simple regression result using CDCR only as the predictor variable. This result indicates that 13.2% of the variance in ROE can be explained by CDCR and as expected, the higher the level of financial flexibility, the better the profitability as measured by ROE.

The third regression model with EPS as dependent variable shows the calculated $F$-statistic is 0.968 and the significant $F$ is at $p$-value of 0.389. This result indicates that the overall model is not significant. Thus, $H1$ and $H2$ are not supported with EPS as dependent variable. This finding was unexpected and suggests that financial liquidity and financial flexibility measured by CCDCR and CDCR are not considered as important factors in predicting EPS as company performance. This is inconsistent with prior empirical evidence (see Ayaydin et al., 2014; Eljelly 2004; Meijer et al., 2013). This inconsistency may be due to the different financial liquidity and financial flexibility measures as well as performance measures used previously. Another possible explanation for this is
that the economic conditions and the market/countries used by prior studies are different from this current study. These results therefore need to be interpreted with caution.

Table 2

Results of Multiple Regression Analysis for Each Profitability Measure (H1-H2)

<table>
<thead>
<tr>
<th>Variables (with hypothesized relationships in parentheses)</th>
<th>Return on Assets</th>
<th>Return on Equity</th>
<th>Earnings per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.833 (0.100)</td>
<td>4.130 (0.032)</td>
<td>23.561 (0.076)</td>
</tr>
<tr>
<td>Hypotheses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1: CCDCR (+)</td>
<td>-13.600 (0.005)</td>
<td>-13.029 (0.099)</td>
<td>-44.676 (0.409)</td>
</tr>
<tr>
<td>H2: CDCR (+)</td>
<td>28.075 (0.000)</td>
<td>30.147 (0.011)</td>
<td>99.569 (0.211)</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.352</td>
<td>0.194</td>
<td>0.050</td>
</tr>
<tr>
<td>Adj. ( R^2 )</td>
<td>0.317</td>
<td>0.151</td>
<td>-0.002</td>
</tr>
<tr>
<td>( F ) value</td>
<td>10.065</td>
<td>4.458</td>
<td>0.968</td>
</tr>
<tr>
<td>Prob. (( F ))</td>
<td>0.000</td>
<td>0.018</td>
<td>0.389</td>
</tr>
<tr>
<td>No. of observations</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Dependent Variable</td>
<td>ROA</td>
<td>ROE</td>
<td>EPS</td>
</tr>
</tbody>
</table>

Note. Predictors: (Constant); CCDCR = current cash debt coverage ratio; CDCR = cash debt coverage ratio; * Significant at the 0.05 level

Table 3

Results of Simple Regression Analysis for Return on Equity (H2)

<table>
<thead>
<tr>
<th>Variables (with hypothesized relationships in parentheses)</th>
<th>Return on Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.218 (0.032)</td>
</tr>
<tr>
<td>Hypotheses:</td>
<td></td>
</tr>
<tr>
<td>H2: CDCR (+)</td>
<td>13.522 (0.021)</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.132</td>
</tr>
<tr>
<td>( F ) value</td>
<td>5.768</td>
</tr>
<tr>
<td>Prob. (( F ))</td>
<td>0.021</td>
</tr>
<tr>
<td>No. of observations</td>
<td>40</td>
</tr>
<tr>
<td>Dependent Variable</td>
<td>ROE</td>
</tr>
</tbody>
</table>

Note. Predictors: (Constant); CDCR = cash debt coverage ratio; * Significant at the 0.05 level

Further examination was conducted to check which of the two cash flow ratios is relatively more important than the other to predict profitability (see Table 4). The results indicate that CDCR (Std. \( \beta = 1.152 \)) is more important than CCDCR (Std. \( \beta = -0.816 \)) in predicting ROA, CDCR (Std. \( \beta = 0.809 \)) is more important than CCDCR (Std. \( \beta = -0.511 \)) in predicting ROE, and CDCR (Std. \( \beta = 0.417 \)) is more important than CCDCR (Std. \( \beta = -0.274 \)) in predicting EPS. This result may be explained by the fact that CDCR as a measure of financial flexibility assesses company’s ability to settle its total liabilities using net cash flow from operating activities whereas CCDCR assesses company’s ability to settle its current liabilities only.
Table 4

Results of Standardized $\beta$ for Each Profitability Measure ($H1$-$H2$)

<table>
<thead>
<tr>
<th>Variables (with hypothesized relationships in parentheses)</th>
<th>Return on Assets Standardized Coefficients $\beta$</th>
<th>Return on Equity Standardized Coefficients $\beta$</th>
<th>Earnings per Share Standardized Coefficients $\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypotheses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$H1$: CCDCR (+)</td>
<td>-0.816</td>
<td>-0.511</td>
<td>-0.274</td>
</tr>
<tr>
<td>$H2$: CDCR (+)</td>
<td>1.152</td>
<td>0.809</td>
<td>0.417</td>
</tr>
<tr>
<td>No. of observations=</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Dependent Variable</td>
<td>ROA</td>
<td>ROE</td>
<td>EPS</td>
</tr>
</tbody>
</table>

Note: CCDCR = current cash debt coverage ratio; CDCR = cash debt coverage ratio.

There are a number of limitations to our study. Firstly, we used a single nation and single sector, Indonesia’s basic industry and chemicals sector. Secondly, the regression analysis was conducted for only one financial year. Despite the limitations, it is felt the results from the current study provide valuable insights into the influence of financial liquidity and financial flexibility measured by cash flow from operating activities ratios on the three profitability indicators.

5. Conclusion

We present evidence that operating cash ratios measured by current cash debt coverage ratio and cash debt coverage ratio can predict company’s profitability. Our study is motivated by the gap in the literature that examines the importance of cash flow based measures in predicting profitability. Current cash debt coverage ratio measures company’s financial liquidity and cash debt coverage ratio measures financial flexibility. Profitability is measured by return on assets, return on equity, and earnings per share. The testable hypotheses pursued in this paper stems from the argument that cash flow information is very important in predicting company performance and cash flows can have incremental value relevance relative to either earnings or fund flows.

Despite convincing arguments that the higher the level of financial liquidity and financial flexibility, the better the profitability, the empirical evidence is mixed. As expected, the results indicate a significant positive influence of cash debt coverage ratio on both return on assets and return on equity. The results reveal that financial flexibility is an important predictor of profitability. The higher the level of financial flexibility measured by cash debt coverage ratio, the better the profitability measured by return on assets and return on equity. These findings may help us to understand that the efficient financial flexibility management is necessary to avoid losses whilst holding certain level of financial flexibility. Thus, these findings are relevant to previous literature on the resolution of the importance of cash flow based measures in predicting profitability. However, one unanticipated finding was that cash debt coverage ratio has no predictive ability on earnings per share.

Contrary to our hypothesis, the empirical results surprisingly show a significant negative influence of current cash debt coverage ratio on return on assets, suggesting that, the higher the level of financial liquidity, the worse the profitability. An implication of this is the excessive liquidity could cause of lost profits indicating the inability of the management to utilize company’s assets efficiently. Moreover, our results indicate that current cash debt coverage ratio has no important contribution to return on equity and earnings per share. Further, our findings are also suggest that cash debt coverage ratio has more predictive ability relative to current cash debt coverage ratio on profitability. Overall, the evidence highlights the influence of financial liquidity and financial flexibility on profitability as measured by return on assets and return on equity. This study
contributes to current understanding of the usefulness of operating cash flow ratios in predicting profitability.

Suggestions for future research are as follows. Other cash flow ratios could be related to other measures of corporate performance. For example, future research could utilize cash interest coverage ratio, capital expenditure ratio, operating cash flow/sales ratio, free cash flow/operating cash flow ratio as predictor variables with size and leverage as control variables to determine what kind of cash flow ratios could predict operating performance.

References


