

FREE CASH FLOW INDICATORS IN TEXTILE SECTOR OF PAKISTAN

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ABSTRACT

This study is based on a lot of empirical evidences where ROA, ROE and EPS are used as proxy variables against profitability for free cash flows. Annual reports of the companies are used for data collection for a specified period from (2016-2020). The empirical analysis is done in order to investigate the influence of FCF on the profitability. As a result, the data was analyzed using a correlation and Panel regression analysis. The study explored that sales growth help the firms to improve free cash flows in an efficient way. Firm size also integrates towards superior free cash flows. The debt ratio increases the return on equity and declines the earnings per share, representing mixed evidence. The study explored that higher tangible assets brings more free cash flows. The result shows inconclusive findings in determination the free ash flow of firms.

KEYWORDS

Free Cash Flow (FCF), Profitability, Panel Regression Analysis.

1. INTRODUCTION

Michael Jensen pioneered the ideas of idle cash flow (1986). According to Jensen (1986), huge FCF causes clash within the company, i.e., between the preferences of managers and stockholders, negatively affecting its output (Hau, 2017). The most important factor that can impact an organization's profitability and survival is cash. Companies with high FCF are probable to fascinate investors looking for cost-effective ways to spend their extra funds in market. Creditors and investors are eager to put money into businesses with strong free cash flows because they are more profitable. Jensen presented the free cash flow theories initially in 1986, and it eventually emerged as one of the latest topics in the economic literature that explains company activity that is not justified by preceding economic theories (Griffith & Carroll, 2001).

The FCF hypothesis states that there is a negative association between corporate performance and the quantity of FCF under management's control. FCF is reduced by debt financing or dividend payment, which has a favorable impact on corporate performance. Fairfield, Whisenant, and Yohn (2003), Titman, Wei, and Xie (2003), and

Free Cash Flow Indicators in Textile Sector of Pakistan Dechow, Richardson, and Sloan (2008) explain that overinvestment of FCF under management has a detrimental impact on performance. Park and Jang (2013), Heydari, Milad, and Javadghayedi (2014), Brush, Bromiley, and Hendrickx (2000), and Wang (2010) all found a negative relationship between performance and FCF in their research. Moreover, Rozeff (1982) and Easterbrook (1984) discovered that giving dividends or increase in dividend were required to reduce agency expenses. DeAngelo and DeAngelo (2000), as well as La Porta, Lopez-de-Silanes, Shleifer, and Vishny (2000), have confirmed these findings (2000). In contrast, Aigner, Lovell, and Schmidt (1977) came to opposite findings about dividends.

Hubbard (1998) found that the relationship between FCFs and profitability is both positive and significant, with an increase in a firm's cash flow leading to a comparable increase in profits. This is accomplished by investing. For making use of increased cash flows, the company should consider making crucial investment decisions. After all development and maintenance expenses have been allocated, the remaining amount is used for reinvestment to achieve the key business requirements. Such extra amount of cash is known as free cash flow. Stockholders should be alert that the companies could have significant hold on FCF which can leads to the extension of time for the payment of bills and also reducing time they take for collections from customers (Christine, 2014).

1.1 Free cash flow

FCF is one of the most important instruments for evaluating a business unit's financial results since they demonstrate how much money the organization has left over after paying for asset maintenance or growth (Habib, 2011). Shareholders may use free cash flows to determine the financial solvency of a business firm. Managers invest FCF in ventures with a positive NPV value. As a result of productive use of retained capital it can participate to the firm's value Firms can fund their investments for both internal and external sources. Retained earnings and depreciation are examples of internal sources, while debt and equity are examples of external sources (Jensen & Jensen).

Maintaining a sufficient amount of liquidity within a company is critical to its efficient running. Managers have a tendency to preserve a huge portion of the firm's assets in cash and equal to cash in order to reinvest in other tangible assets, make payments to stockholders, and maintain retained earnings in the company (Hann, Ogneva & Ozbas, 2010). A company's plan on capital structure, working capital requirements, cash flow management & dividend payments describe the amount of cash it has on hand. FCF is defined by (Jensen, 2000) as cash flow that exceeds what is needed to fund positive NPV investments. Because surplus cash may not be given to shareholders, FCF is a symptom of agency difficulties. Any possession undertaken by these organizations are by definition, negative net present value when they have FCF.

Free cash flow is a measure of how much cash a company produces after deducting capital expenses like buildings and facilities. This cash may be used for growth, dividends, debt reduction, among other stuff. The amount of cash the corporation set aside after paying on property maintenance or construction is shown as FCF. FCF is also known as cash available to resource providers (equity or debt provider). FCF, according to Jensen (1986), is surplus cash of what is necessary to fund all positive net

present value ventures. Shareholders should also be aware that businesses can affect their FCF by deferring payment of bills (thereby saving cash), reducing the collection period against amounts due on customers (thereby speeding cash receipt), and deferring stock purchases. A company policy determines the amount of cash it keep on hand and capital structure, working capital needs, cash flow management & acquisitions. Since surplus capital cannot be returned, FCF is an indication of agency issues.

Cash flow management is the most critical component for small firms, avoiding lengthy cash shortages produced by a large disparity between cash inflows and outflows. Directors and management in many organizations assumed cash flow management as one of the most significant tools for monitoring and managing the normal functioning of firm's in twenty-first century (Osega et al., 2017). A business organization must be able to design various strategies for picking the best ingredients of its cash flows that will be employed in the company's operation to enhance productivity or accomplish performance in order for the cash flows to be well organized and successfully employed. This procedure should be based on criteria developed by the finance manager after comprehensive financial planning and analysis.

1.2 Financial Performance

According to Harward "profitability is the potential of a given investment to gain a return from its use" (Srivastava and Srivastava, 2006). Profit maximization is said to be the primary goal of all businesses. Management is responsible for making the best decisions possible in order to increase the company's profits. Firms often have profit targets, and managers are often compensated for meeting them, but their objectives are much broader than just profits (Chandra, 2002). The term profit has already been established, but its definition varies depending on the use and intent of the business in order to generate income. As a result, profitability can be described as an investment's capacity to produce profit from its use. Profitability ratios assess a company's ability.

Cash is more equivalent to the engine that drives a business forward. If cash management falls short of the acceptable level, the business will most likely go bankrupt. Furthermore, high profits do not imply that a company is liquid in any way. Cash flow analysis provide awareness about the company's key business practices and management decisions that affect profitability and growth (Nahr & Akbar, 2015). Profit is always the primary goal for businesses, but if cash is in short supply, growth may slow and the company's survival could be compromised.

1.3 Study Background

The problem of free cash flow on a company's success has some issues for both investors and business managers who are either unaware of the value of the interdependence relationship that exists between investors and businesses. Managers typically keep a significant portion of their company's assets in cash and cash equivalents to reinvest in other tangible assets, give dividends to shareholders and keep cash on hand. FCF arises problem when it becomes clear that managers didn't spend it in the best interests of shareholders, but rather kept it and invested it in negative NPV ventures that benefited them, preferring bonuses and internal projects.

The agency problem arises when managers did not spend FCFs on shareholders benefits, rather kept them and invested them in negative NPV projects that benefited

Free Cash Flow Indicators in Textile Sector of Pakistan them, preferring bonuses and internal projects. When a company produces a lot of FCF, there are a lot of bone of contention b/w shareholders and management over payout policies. The issue is that how to persuade managers to expel cash instead of spending it on projects having low returns or waste it on inefficient operations (Nuccia & Pozzolo, 2000). The effects of the FCF theory on firm investment behavior have been studied. According to Lamont (1997) and Berger and Hann (2003) firms that spent more had less FCF.

Harford (1999) and Opler, Pinkowitz, Stulz, and Williamson (1999, 2001) found that companies with a lot of cash are possible to make acquisitions. Moreover, these cash-rich possession are accompanied by unusually poor operating results of financial strength (Thangjam, 2015). Critical problems may be faced by the firms in case they want to increase their profitability to endure liquidity in order to remain solvent. Chung, Firth and Kim (2015), established that a balance between both purposes is crucial for business survival. This is called trade-off. Firms that focusing on how to increase profitability may most probably reduce the firms' free cash flow.

Contrarily firms focusing on FCF maximization may most probably decrease the profits of a firm (Scatizzi, 2009). Muthusi (2014) investigated the impact of FCF on the profitability of five-star hotels in Kenya and found that FCF had a positive & significant impact on hotels profitability in Kenya. Akumu (2014) examined the free cash flow impact on firms profitability listed on Nairobi Stock Exchange where inverse relationship disclosed between tested variables. The recent studies done have also uncovered mixed findings consequently need for further research to find undeniable relationship between FCF and firms profitability.

Prof. Clark proposed the dynamic theory of profit in the year 1990. "Profit is the difference between the price and the cost of producing the commodity," he says. The profit, on the other hand, arises as a result of dynamic changes. Six changes are predicted in a dynamic scenario, and each one reacts appropriately. They are as follows: 1- Changes or an increase in population, 2- Changes in tastes and liking, 3- Multiple wants, 4- Capital formation, 5- Technological development, and 6- Changes in the system of corporate organization (Economics discussion, 1990). Hawley's profit theory said that risk-taking is important for an entrepreneur, where he disclosed his business to risk in exchange for a return in the form of profit. The reward must be greater than actual value of risk because no entrepreneur want to take risk to gain only a standard reward (Carver, 1901).

Agency conflicts, according to the agency theory, originate from a potential conflict of preferences between shareholders (principals) and managers (agents) of businesses. The major responsibility of managers is to run the company in such a way that it produces profits and cash flows for its owners (Elliot and Elliot, 2002). For the sake of profit, trade-off theory states that if a company is more profitable, it will prefer debt financing over equity financing. Three factors are at work in this stance (Raheman, et al. 2007). This study gives more knowledge about Free Cash Flow (FCF) and its indicators in Textile sector firms on Pakistan Stock Exchange.

2. LITERATURE REVIEW

This study is informed by three theories namely: Free Cash Flow Theory, Agency theory and Pecking order theory. These theories provide theoretical evidence of various arguments by different scholars and researchers in relation to free cash flow on the profitability.

This Research conducted by (Ali, Ormal, & Ahmad, 2018) on firms listed in automotive sector of Germany to see the outcome of FCF on profitability of firms. Another study by (Ambreen & Aftab, 2016) disclose that by using correlation and regression models we found that firm size and retained FCF effect the profits of the firm. This study is conducted to discover the relationship between FCF and firms profit. Regression results of the study states that there is a significant & negative association between FCF & firms profitability. The study additionally signifies that regression model explained that there is 76.65% distinction in ROA of the firms.

Furthermore, in the theory of the FCF premise for sales expansion and company efficiency, (Sadaf Ambreen, 2016) showed the association between FCFs and sales expansion of the company's performance. In particular, it was reported that the firms with more FCF allow organization to better adapt and mitigate the negative impact of FCF on the output of businesses. This provides greater revenue growth, so it indicates that there is a positive bond between FCF and sales development contributing to firm's performance (Brush, Bromiley and Hendrickx, 2000).

Ahmed and Javid (2009) used descriptive survey to see the effect of FCF on dividend payout ratio the results indicated that firms with high FCF pay higher dividends. According to Hwang et al., (2013); John et al., (2015), Labhane and Mahakud (2016), Byrd (2010), Wang (2010), Brush et al. (2000) there is a negative association between FCF & performance. Sindhu (2014) study the relationship between FCF and dividend in the existence of a moderator, size of the firm. Sadaf (2016) analyzed the affiliation between free cash flow and firms' profitability. Another study conducted to see the impact of FCF on firms profit by Zhou et al. (2012).

The study by Kadioglu et al. (2017) looked at how FCF affects the profits of companies listed on the Borsa Istanbul between 2009 and 2015, and found a negative association between free cash flow and performance as measured by Tobin's Q ratio. Leverage also has a positive effect on performance. According to Sitthipongpanic, (2017) having family proprietors reduces the sensibility of investment and cash flow. Guizani Moncef, (2018) proposed that large managerial shareholdings increased FCF by reducing dividend payouts, and Tuan, (2018) proposed that free cash flow and corporate profitability were linked in arising economies.

The amount of the company's FCF is the key advantage for each stakeholder to be used in their own interests. A company with a high FCF can pay its debts to creditors, payment of dividends to investors, and expand its business. Managers have a propensity to use free cash flow as a tool to expand a business so that the company can grow. On the other hand, shareholders desire a large share of dividends from the sum of FCF.

According to White et al. (2003: 68) greater the FCF available in the business the better the company will be because it will have cash available for expansion, debt

Free Cash Flow Indicators in Textile Sector of Pakistan payments, and dividends. Wang investigated whether the number of shares retained by the largest shareholder has an impact on the profitability of the company's revenue growth. The results showed that the more FCF the company had, the lower its sales growth sensitivity was, and as the largest shareholder with a higher proportion, its sales growth sensitivity increased.

3. DATA AND METHODOLOGY

This study aims to examine the stability of FCF under the consideration of firm's profitability. For this purpose, all the firms have been examined to identify the different firm specific factors which play a comprehensive role in firm's profitability and free cash flows. All these firms have comprehensive range of operations and these accounting based measures or firm specific factors notably explain the free cash flows of firms in textile sector. The textile sector is selected over a specific period of 5 years (2016-2020).

3.1 Sample Selection, Data Collection and Screening

The sample and population is comprised on non-financial firms in Textile sector of Pakistan. Total 95 Textile non-financial firms are listed in Pakistan stock exchange. Out of this specified population a sample of 50 firms is elected on the basis of availability of data from 2016 to 2020.

3.2 Data Sources

The main data sources of this study are annual reports published by companies annually on their specified websites or published by the State Bank of Pakistan on their official website. In this study, the information about sales growth, firm size, debt ratio, tangible assets, equity multiplier, asset turnover and profits is collected for the specific period from 2016-2020.

3.3 Variables Measurement

There are various ways through which accounting based profitability of the firm is measured. This study utilizes the firm profitability for the measurement of free cash flows which are return on assets, return on equity and earnings per share. The independent variables are the firm level variables which plays an indispensable role in defining the free cash flows of textile sector firms. The measurement of those variables is as

- **Dependent Variables**
 - Return on Asset (ROA) = Net Income / Total Assets
 - Return on Equity (ROE) = Net Income / Shareholder's Equity
 - Earnings per Share (EPS) = Total Earnings / Outstanding Shares
- **Independent Variables**
 - Sales Growth (SG) = Current Year Net Sales / Previous Year Net Sales
 - Debt ratio (DR) = Total Debts / Total Assets
 - Tangibility (Tang) = Tangible Assets / Total Assets
- **Control Variables**
 - Equity Multiplier (EM) = Total Assets / Shareholder's Equity
 - Asset Turnover (AT) = Net Sales / Total Assets

ROE	0.097	1.000							
EPS	0.179	0.303	1.000						
SG	-0.044	0.032	-0.065	1.000					
FS	0.139	0.295	0.030	0.199	1.000				
DR	0.141	0.030	-0.038	0.071	0.031	1.000			
Tang	-0.251	0.073	-0.259	-0.040	0.157	0.228	1.000		
EM	0.180	0.338	0.080	0.027	-0.164	-0.054	0.095	1.000	
AT	-0.104	-0.086	0.054	0.154	0.214	0.265	-0.358	-0.107	1.000

4.3 Panel Regression Analysis

Panel regression analysis depicted the response of the dependent variables with a change in independent variables. The ROA, ROE and EPS treated as dependent variable that shows the profitability of firms towards more free cash flows and independent variable like sales growth, firm size, debt ratio, tangible assets and other control variables like equity multiplier and asset turnover. The Hausman test suggested the fixed effect model for empirical testing of the relationship. Table 3 depicts the empirical results about the indicators of Free Cash Flows in textile sector of Pakistan.

It is explored from the results that sales growth a significant factor of increase in profitability of firms in textile sector of Pakistan. The findings suggested that positive growth in sales would more likely to increase the profitability and free cash flows. The better sales growth would help the firms to generate more internal cash flows. The firm size depicted no relationship with return on assets of firm; however large textile firms have better profitability ratios. They have efficient operations and better market worth which in turn helps them to increase their profitability. It indicates that large size firms have better free cash flows. The findings explored that leverage or debt ratio does not play any significant role towards return on assets of firms. The debt ratio increases the profitability of firms in the way to improve their performance and free cash flows. These firms have better growth opportunities and they prefer to utilize the debt to improve the performance. This helps them to generate more free cash flows. On the contrary, the debt declines the earnings per share of firm. The coefficient of asset tangibility shows a significant increase towards the increase in performance of firms. The sufficient availability of tangible assets can be better utilized to generate more profits. This utilization helps the firms to improve the performance in a better way and sufficient free cash flow availability. Moreover, the equity multiplier shows a significant increase in firm performance. All these factor helps to generate better free cash flows of firms in textile sector of Pakistan.

Table 3
Estimation Results about the Indicators of Free Cash Flows

Profitability is Dependent Variable in all the Columns			
Variables	ROA	ROE	EPS
SG	0.01120** (0.00566)	0.20192*** (0.05427)	0.12717*** (0.03672)
FS	-0.03149 (0.01997)	0.35246*** (0.12765)	0.324629*** (0.05490)

DR	0.05656 (0.06119)	0.48275*** (0.16594)	-0.28639*** (0.09034)
Tang	0.27632*** (0.07555)	0.33504* (0.1879)	0.15385 (0.8896)
EM	0.06124*** (0.01994)	0.01802*** (0.00441)	0.09100** (0.03928)
AT	0.02569 (0.02326)	-0.45788 (.55929)	0.82562 (1.01347)
Cons	0.76622** (0.39643)	0.10149 (0.8597)	-2.1436 (0.41969)
Obs	250	250	250

Note: Table 3 depicts the results about fixed effect model. SG is the sales growth, FS is firm size, Dr is debt ratio, Tang is the tangibility of assets, EM is the equity multiplier, AT is the Sales turnover.

5. CONCLUSION

The study aims to explore the free cash flows of firms in textile sector of Pakistan. For this purpose, the data is collected over a specified period of time i.e. 2016-2020 from annual financial statement of firms. The Hausman test suggested applying the fixed effect model in across all the regression models. The findings suggested that sales growth is a significant factor of increase in profitability of firms. Firm size is also a noteworthy feature of better profitability which helps the firm better performance. It is concluded from the results that debt ratio is insignificantly related with return on assets. The findings show that debt as leverage factors improve the return on equity of firms but decline the earnings per share. Tangibility as a factor of firm profitability helps the firms to improve the performance and free cash flows. All other control variables are significantly defining the profitability and free cash flows. The study suggests that publicly traded companies should try to invest in successful enterprises in order to keep excess cash flows, which is considered a company's potential to produce cash and an essential basis for stock valuation. Hence, some shareholders place a higher value on FCF than any other financial metric, including EPS. This study is conducted in a five-year time frame with restricted resources, which limited the extent and depth of the research. As a result, these data cannot be used to make broad generalizations about the profitability of textile firms listed in Pakistan stock exchange.

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