



Profitability and Valuation Indicators and financial structure of food processing companies of Indian Economy

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Abstract

The study tries to examine the firm intrinsic variables of food processing companies i.e. profitability and valuation and its impact on financial pattern of FPU's of India. Many studies have supported the impact of profitability on financial structure but less research has been done in the area of valuation ratios of Food Processing Units (FPU). To maintain the growth momentum of Food processing sector unit's investments are necessary. A sound financial environment and a proper mix of company's financial structure will help in attracting investments. Also the present study suggests firm intrinsic variables of immediate concern for restructuring purposes. For establishing the relationship between financial structure and profitability and valuation indicators Regression Analysis has been used. Financial Structure of top five food processing companies listed in Bombay Stock Exchange (BSE) is selected for the study. On the other hand ROA, ROE and NPM is considered as profitability variables and PBV ratio and MC/NOR is considered as valuation indicators of FPU's. The result indicates that there is a significant impact of Profitability indicators on company's financial structure while no significant impact of valuation ratios of financial structure.

Keywords: *Profitability, Valuation, Financial structure, ROA, ROE, NPM, Price to Book Value, Market capitalization to Net Operating Revenue and Regression.*

Introduction

Due to the linkage of Food Processing Sector with agriculture and industry, it is the crucial sector of Indian economy. Food Processing Industry is divided into organized and unorganized sectors in which 75% of the segment belongs to unorganized one. In spite of a small percentage of organized sectors it is growing at much faster pace. Looking towards to FPI growth, it is exposed to many hurdles as well. As per a report by Corporate Catalyst India, the biggest challenge in front of FPI is lack of suitable infrastructure in the shape of cold chain, packaging centers, value added center, modernized abattoirs etc. FICCI has carried out the work and identified certain important issues which should be addressed immediately and appropriately by FPI. Access to Credit, lack of specific plan to attract private sector investments and taxation are few of them. Government of India has taken various policy measures and brings reforms to provide stability in the sector. To attract private sector investments it is essential for food processing companies to have a balanced financial structure having sound solvency and liquidity position. The financial structure decisions are determined by a varied set of factors (Getzmann, et al., 2010). Various studies have been conducted by researchers to identify the influencing factors of financial structure. A financial structure is a composition of short term debts and long term debts of varied nature, reserves and surplus and capital base of a firm. Various researches have supported the consideration of firm specific factors and macroeconomic variables while designing the financial structure of a firm. Both the factors play a vital role in the financial decision making of companies. Firm's intrinsic variables like profitability and valuation are one among the determining factors of company's financial



structure. Profitability indicates level of debt and equity issue decisions taken by company and valuation indicates the easiness in availability of funds. While making investments decisions it is necessary to evaluate fundamentals of the organization. It gives insight of companies pay back capacity and growth momentum. The paper tries to cover major profitability and valuation indicators and its influence on Food processing Industry of India. The rest of this paper is structured as follows: The second section concentrates on the relevant literature discussing the effects of the various macroeconomic variables on financial structure of firms. The third section focuses on the research methodology, fourth section represents the definitions of the variables used, the fifth and the sixth section present the data analysis and results and the discussion respectively. The last section concludes the main findings of the paper, brings out the implications of the results and discusses the scope for future research.

Review Of Literature

As per Nurlailyet. al (2013), Capital structure decisions are one of the most critical areas for any business organization. It is important because of the need to minimize a firm's cost of capital also maximizing shareholder's wealth. Hence, capital structure decisions have great impact on the financial performance of the firm. The influence of Capital Structure on Financial Performance showed significantly positive. Mokhovaa and Zineckera (2014) argued that the capital structure and its adjustment can be influenced by several internal and external factors or so called determinants of capital structure. In fact internal factors and their impact can be managed by a company, at the same time macroeconomic factors cannot be controlled by the managers. However both types of determinants have a significant influence on the corporate capital structure. Many studies have been conducted in the area of firm intrinsic variables on financial performance of companies. It has been suggested by researchers that internal variables like assets, size, growth etc. impact the financial structure of firms. Lim (2012) supports that capital structure is closely related to firm-level characteristics. Frank and Goyal (2009) mention in their study that median industry leverage, market-to-book assets ratio, tangibility of assets, profits, log of assets and expected inflation are constant factors to explain market leverage. Further, Bhabra et al. (2008) also signifies the importance of internal factors influencing capital structure decision. The researcher has considered percentage of tangible assets, size, profitability, and growth opportunities as firm's internal variables. The firm level characteristics influence financial structure positively and negatively as well. It depends upon the nature and relationship between them. A study by Shah and Hijazi (2004) on listed non-financial companies in Pakistan showed that firm size and leverage had a direct relationship indicating that big firms resort to greater use of debt. Additionally growth opportunities have inverse relationship with the leverage, and profitability was strongly positively correlated to leverage. Feidakis and Rovolis (2007) projected that size and profitability are positively and negatively related to capital structure. Firm specific factors play a big role in financial structure composition but the role of economic variables cannot be overlooked. Based on the literature review there are some key internal factors that have significant effect on the financing choice of a company: profitability (Barton & Gordon, 1988; Bauer, 2004; Bastos, Nakamura, & Basso, 2009; Bokpin, 2009; Dincergok&Yalciner, 2011; Keshtkar, Valipour, & Javanmard, 2012 and etc.), asset tangibility (Korajczyk& Levy, 2003; Bastos, Nakamura, & Basso, 2009; Frank&Goyal, 2009; Nguyen & Wu, 2011), growth opportunities (Titman & Wessels, 1988; Ozkan, 2001; Bauer, 2004; Kouki& Said, 2012), non-debt tax shields (Ozkan, 2001; Korajczyk& Levy, 2003; Bauer, 2004; Kouki& Said, 2012; Lim, 2012), firm size (Michaelas, Chittenden & Poutzioris, 1999; Korajczyk& Levy, 2003; Bauer, 2004; Hanousek&Shamshur, 2011; Nguyen & Wu, 2011; Lim, 2012).

Objectives Of The Study



To find out the level of dependency of Shareholders funds of Food processing industry on profitability and valuation indicators of food processing companies.

To find out the level of dependency of Long term funds of Food processing industry on profitability and valuation indicators of food processing companies.

To find out the level of dependency of Short term funds of Food processing industry on profitability and valuation indicators of food processing companies.

Hypothesis:

Ho1: There is no significant impact of profitability indicators on Shareholders' funds of Food processing company.

Ho2: There is no significant impact of valuation indicators on Shareholders' funds of Food processing company.

Ho3: There is no significant impact of profitability indicators on Long term funds of Food processing company.

Ho4: There is no significant impact of valuation indicators on Long term funds of Food processing company.

Ho5: There is no significant impact of profitability indicators on Short term funds of Food processing company.

Ho6: There is no significant impact of valuation indicators on Short term funds of Food processing company.

Data, Variables And Research Methodology

(A) Data And Variables

The study has been conducted by selecting various variables i.e. Shareholders Funds, Long term funds & Short term funds which represents financial structure of top five food processing companies of India (on the basis of market capitalization) and are considered as Dependent variables. ROA, ROE and NPM are representative of profitability variables and Price to Book Value Ratio and Market Capitalization to Net operating revenue is representative of Valuation variables are considered as Independent variable. Annual Data from 2004 to 2016 of company's financial structure, profitability and valuation ratios have been collected from company's annual report. Regression was applied to derive the relationship between financial structure and profitability and valuation variables.

(B) Research Methodology

For evaluating the degree of dependency of financial structure on Valuation and Profitability indicators; Linear Regression has been used by SPSS. For the study of financial structure of companies, equity share capital, reserves and surplus, Long term borrowing and short term borrowings are considered. Company's internal characteristics are represented by various proxy variables i.e. ROA, ROE and NPM for Profitability and Price to Book Value Ratio and Market Capitalization to Book value ratio for Valuation. Natural log return of the data has been calculated for the analysis.

Result And Discussion And Hypothesis Testing

Table 1: Impact of Profitability and Valuation indicators
on Financial Structure of Nestle India Ltd.



Name of Food Processing Company	Indicators	Independent Variables	Dependant Variable	Standardized Coefficients		Adjusted R square	F Value	Significance	Hypothesis Accept/Reject
				Beta Value	Significance				
NESTLE INDIA	Profitability Indicators	Return on Assets	Shareholders Fund	-0.396	0.254	0.852	20.132	0.001	Reject
		Return on Equity		-1.483	0.001				
		Net Profit Margin		2.607	0				
		Return on Assets	Long Term Funds	-1.692	0.06	0.172	1.693	0.255	Accept
		Return on Equity		0.88	0.241				
		Net Profit Margin		0.69	0.343				
		Return on Assets	Short Term Funds	-1.859	0.029	0.331	2.648	0.13	Accept
		Return on Equity		0.892	0.192				
		Net Profit Margin		1.051	0.129				
	Valuation Indicator	Price/Book Value Ratio	Shareholders Fund	-1.098	0.041	0.287	3.014	1.06	Accept
		Market Capitalisation/Net Operating Revenue		0.804	0.112				
		Price/Book Value Ratio	Long Term Funds	0.009	0.989	0.001	0.005	0.995	Accept
		Market Capitalisation/Net Operating Revenue		-0.043	0.944				
		Price/Book Value Ratio	Short Term Funds	0.08	0.896	-0.246	0.012	0.988	Accept
Market Capitalisation/Net Operating Revenue	-0.09	0.884							

Interpretation: The above table indicates that there is a significant impact of profitability variables on Shareholders' funds of Nestle India Ltd. The Adjusted R Square is .852 which reflects 85.2 % impact of profitability on Shareholders' funds. Further it can be seen that there is no significant impact of profitability variables on long term funds and short term funds. Also the valuation ratios do not significantly impact any of the financial structure variables.

Table 2: Impact of Profitability and Valuation indicators on Financial Structure of Britannia Industries

Name of Food Processing Company	Indicators	Independent Variables	Dependant Variable	Standardize d Coefficients		Adjusted R square	F Value	Significance	Hypothesis Accept/Reject
				Beta Value	Significance				
BRITANNIA INDUSTRIES	Profitability Indicators	Return on Assets	Shareholders Fund	0.446	0.04	0.976	138.284	0	Reject
		Return on Equity		-0.8	0				
		Net Profit Margin		0.716	0.006				
		Return on Assets	Long Term Funds	-0.631	0.568	0.167	1.667	0.26	Accept
		Return on Equity		-0.326	0.39				
		Net Profit Margin		0.21	0.855				
		Return on Assets	Short Term Funds	-0.03	0.983	-0.386	0.071	0.974	Accept
		Return on Equity		-0.019	0.967				
		Net Profit Margin		-0.132	0.929				
	Valuation Indicator	Price/Book Value Ratio	Shareholders Fund	-1.429	0	0.971	171.121	0	Reject
		Market Capitalisation/Net Operating Revenue		1.353	0				
		Price/Book Value Ratio	Long Term Funds	0.094	0.84	0.104	1.578	0.264	Accept
		Market Capitalisation/Net Operating Revenue		-0.599	0.221				
		Price/Book Value Ratio	Short Term Funds	0.169	0.758	-0.233	0.054	0.948	Accept
Market Capitalisation/Net Operating Revenue	-0.155	0.777							

Interpretation: The above table indicates that there is a significant impact of profitability and valuation variables on Shareholders' funds of Britannia Industries. The Adjusted R Square is .976 which reflects 97.6 % impact of profitability on Shareholders' funds. Further it can be seen that there is no significant impact of profitability variables on long term funds and short term funds. In the case of valuation ratios, the Adjusted R Square is .971 which reflects 97.1 % impact of valuation on Shareholders' funds. There is no significant impact of valuation ratios on Long term funds and short term funds.

Table 3: Impact of Profitability and Valuation indicators on Financial Structure of Glaxo Smithkline Consumer Healthcare

Name of Food Processing Company	Indicators	Independent Variables	Dependant Variable	Standardized Coefficients	Adjusted R square	F Value	Significance	Hypothesis Accept/Reject					
GLAXO SMITHKLINE CONSUMER HEALTH CARE	Profitability Indicators	Return on Assets	Shareholders Fund	-0.905	0.441	0.933	37.902	0.001	Reject				
		Return on Equity		-1.01	0.001								
		Net Profit Margin		0.11	0.509								
		Return on Assets	Long Term Funds										
		Return on Equity											
		Net Profit Margin											
	Return on Assets	Short Term Funds	-0.278	0.567	-0.079	0.806	0.542	Accept					
	Return on Equity		0.152	0.809									
	Net Profit Margin		-0.481	0.473									
	Valuation Indicator	Price/Book Value Ratio	Shareholders Fund	-2.941					0.018	0.558	6.059	0.036	Reject
		Market Capitalisation/Net Operating Revenue		2.526					0.033				
		Price/Book Value Ratio											
Market Capitalisation/Net Operating Revenue		Long Term Funds											
Price/Book Value Ratio													
Market Capitalisation/Net Operating Revenue			Short Term Funds	-1.146	0.42	0.077	1.334	0.332	Accept				
Price/Book Value Ratio	1.578	0.278											
Market Capitalisation/Net Operating Revenue													

Interpretation: The above table indicates that there is a significant impact of profitability and valuation variables on Shareholders' funds of Britannia Industries. The Adjusted R Square is .933 which reflects 93.3 % impact of profitability on Shareholders' funds. Further it can be seen that there is no significant impact of profitability variables on short term funds. In the case of valuation ratios, the Adjusted R Square is .558 which reflects 55.8 % impact of valuation on Shareholders' funds. There is no significant impact of valuation ratios on short term funds.

Table 4: Impact of Profitability and Valuation indicators on Financial Structure of KRBL

Name of Food Processing Company	Indicators	Independent Variables	Dependant Variable	Standardized Coefficients	Adjusted R square	F Value	Significance	Hypothesis Accept/Reject					
KRBL	Profitability Indicators	Return on Assets	Shareholders Fund	-0.086	0.448	-0.029	0.905	0.486	Accept				
		Return on Equity		-0.371	0.845								
		Net Profit Margin		0.81	0.552								
		Return on Assets	Long Term Funds	-0.568	0.542					0.194	1.803	0.234	Accept
		Return on Equity		-1.611	0.352								
		Net Profit Margin		1.941	0.134								
	Return on Assets	Short Term Funds	-0.122	0.897	0.153	1.601	0.273	Accept					
	Return on Equity		0.765	0.659									
	Net Profit Margin		-1.247	0.324									
	Valuation Indicator	Price/Book Value Ratio	Shareholders Fund	-3.445					0.165	0.078	1.422	0.296	Accept
		Market Capitalisation/Net Operating Revenue		3.198					0.194				
		Price/Book Value Ratio		-4.671					0.051				
Market Capitalisation/Net Operating Revenue		Long Term Funds	4.566	0.055	0.25	2.667	0.13	Accept					
Price/Book Value Ratio													
Market Capitalisation/Net Operating Revenue													
Market Capitalisation/Net Operating Revenue	Short Term Funds	0.036	0.987	0.166					1.994	0.198	Accept		
Price/Book Value Ratio													
Market Capitalisation/Net Operating Revenue		-0.613	0.782										

Interpretation: The above table indicates that there is no significant impact of profitability and valuation variables on any of the financial structure variables of KRBL.

Table 5: Impact of Profitability and Valuation indicators on Financial Structure of KWALITY



Name of Food Processing Company	Indicators	Independent Variables	Dependant Variable	Standardized Coefficients		Adjusted R square	F Value	Significance	Hypothesis Accept/Reject
KWALITY	Profitability Indicators	Return on Assets	Shareholders Fund	-0.806	0.448	-0.029	0.905	0.486	Accept
		Return on Equity		-0.371	0.845				
		Net Profit Margin		0.81	0.552				
		Return on Assets	Long Term Funds	-0.568	0.542	0.194	1.803	0.234	Accept
		Return on Equity		-1.611	0.352				
		Net Profit Margin		1.941	0.134				
		Return on Assets	Short Term Funds	-0.122	0.897	0.153	1.601	0.273	Accept
		Return on Equity		0.765	0.659				
		Net Profit Margin		-1.247	0.324				
	Valuation Indicator	Price/Book Value Ratio	Shareholders Fund	-3.445	0.165	0.078	1.422	0.296	Accept
		Market Capitalisation/Net Operating Revenue		3.198	0.194				
		Price/Book Value Ratio	Long Term Funds	-4.671	0.051	0.25	2.667	0.13	Accept
		Market Capitalisation/Net Operating Revenue		4.566	0.055				
		Price/Book Value Ratio	Short Term Funds	0.036	0.987	0.166	1.994	0.198	Accept
Market Capitalisation/Net Operating Revenue	-0.613	0.782							

Interpretation: The above table indicates that there is no significant impact of profitability and valuation variables on any of the financial structure variables of Quality.

Conclusion and Implication

The emerging complexities of business and new practices are challenging business activities day by day. The role of financial manager is also become diversified in respect of managing new threats and opportunities of market. As FPI is one of the potential sector of India growing at a faster pace it is important to consider various intrinsic variables while designing the financial structure composition. The results and interpretation reflects that profitability and valuation do impact on company's financial structure. But it varies with company to company. There is a significant impact of profitability ratios on companies' shareholders funds but not on long term and short term funds. On the other hand valuation ratios also significantly impact on shareholders' funds but not on long term and short term funds. Few of the food processing unit's financial structure do not show any sensitivity towards profitability and valuation ratios. The beta values of Nestle table indicate that profitability ratios significantly impact on shareholders' funds and there is nosignificant impact on long term and short term funds. In case of valuation ratios, it was found that it doesn't influence any of the financial structure variables of Nestle. The beta table of Britannia Industries shows that profitability and valuation ratios do impact on shareholders' funds but no significant impact has been shown on long term and short term funds. The beta table of GlaxoSmithkline Consumer healthcare shows that profitability and valuation ratios do impact on shareholders' funds but no significant impact has been shown on long term and short term funds. In the case of KRBL and Kwality, it was found that there is no significant impact of any of the profitability and valuation ratios on company's financial structure variables. The research will help selected companies to understand and frame the policies related to financial structure and to analyses the proper mix of capital structure. At the same time companies also pay attention towards macroeconomic changes of Indian economy. The study can be further carried on for specific companies also and influence of economic changes can be considered. The firm specific factors can also be considered for the further research.

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