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Promoter Ownership and Leverage: An Empirical Evidence of Agency Problem in Select FMCG Companies

Pinky Mistri

Assistant Professor, PG and Research Department of Commerce, University of Gour Banga Malda – 732103, West Bengal, India

Abstract

The study examines the association between promoter ownership and leverage of Fast Moving Consumer Goods (FMCG) companies listed at BSE in the 'A' category. The FMCG Industry is a vital sector for the Indian economy. Leverage decision is a critical financial decision. In the year, 2020 the revenue of the FMCG market was USD 110 billion. The study tries to investigate the impact of promoter shareholding on the leverage decision of Indian FMCG companies. The study is conducted on a sample of 46 companies and the study period ranges from 2017-2022 for 5 years. The study conducted A panel data model is opted for data analysis. The study also conducted a diagnostic test to further check the reliability of the data. The study indicated a significant positive association between ownership structure and leverage. Due to the existence of agency problems, the leverage decisions deviate from neoclassical models. The study's finding adds to the extant literature on promoter ownership. The positive relationship indicated the existence of an agency problem. Firm executives should try to reduce Agency problems to enhance firm performance.

Keywords: Firm Performance, FMCG Companies, Leverage, Promoter Ownership

1. Introduction

Leverage refers to the financial structure, *i.e.*, the combination of debt and equity. Leverage decision is based on various financial characteristics of the firm. Along with the fianacial characteristics leverage decisions depend on ownership structure (Brailsford *et al.*, 2002; Pindado *et al.*, 2011). Agency theory describes a firm's shareholding patterns and leverage choices. Fama and Miller (1972) introduced the Agency theory. An agency problem results from divergence arising between the owner and the management of the firm, and also such conflict arises between the debtholders and the shareholders. Jensen and Meckling (1976) gave a new direction to research on capital structure by arguing managers prioritize their wealth expansion over firm value. Harris and Raviv (1991) further researched the theory. Overall, agency theory discusses the relationship of conflict between owner and management. Due to agency problems, the leverage decisions diverge from neoclassical theories. In a company's ownership structure promoters are the founders or controlling shareholders (OECD Report, 2020). The preponderance of the studies is on developed economies and very limited empirical studies have analysed firms operating in emerging economies (Dawar, 2014). Very limited research papers in India concentrate on the impact of a promoter's shareholding on the leverage of the company. The study investigates the influence of the ownership composition on the leverage of Indian FMCG companies. According to the Kotak Committee Report set up by SEBI, 2017 on corporate governance, Indian firms have a concentrated ownership structure giving power to promoters to make

*Email: pinkymistri@yahoo.co.in

decisions favourable to them but adversely affecting minority shareholders. The FMCG Industry is one of the biggest and most crucial Industries in the Indian economy. In the year 2023, the FMCG market volume was 121.8 billion and the revenue of the FMCG sector reached 1.58 billion as of December 2022 (IBEF, 2024). Hence, understanding the ownership structure and financial decisions is crucial.

2. Review of Literature

Modigliani and Miller (1958; 1963) is one the pioneer work in the field of leverage. Later on, various other important theories were developed namely Trade-off Theory, Agency Theory, and Pecking order Theory. In the year 1973, Kraus and Litzenberg argued firms' juggling between the cost and benefit of debt theory is called the Trade-off Theory. Initially in the year 1961, Donaldson and later in the year 1984, Myers and Majluf advocated that firms set down a sequence of financing as per its priority namely, the Pecking order Theory (Frank & Goyal, 2003). Berle and Means (1932) emphasized the dominant role of corporations in society and identified the difference between concentrated ownership and scattered ownership with multiple minority shareholders. Fama and Miller (1972) highlighted the gap between managers and stockholders. Jensen and Meckling (1976) stated that the rise of agency problems is caused due to disparate stakeholders, *i.e.,* ownership and control leading to an increase in Agency cost. Eisenhardt (1989) in his study highlighted the cost associated with monitoring managers. Studies like Holmström (1979) and Smith and Stulz (1985) highlighted means to reduce agency problems like compensations, incentives, stock options, performance bonuses, etc. Grossman and Hart (1980) advocated debt can be used as a medium to discipline Managers and control their overinvestment behaviour. Fama and Jensen (1983) suggested that corporate governance measures can mitigate agency problems. Jensen (1986) suggests optimal capital structure can minimize Agency cost. Shleifer and Vishny (1986, 1997) explored the gap between large shareholders and corporate control and argued that concentrated ownership like leads to possible entrenchment and investors with large cash flow share monitor management free-riding behaviour. Aganin and Volpin (2005) argued countries with undeveloped capital markets and poor legal framework favors control rights over cash flow right. Brailsford *et al.* (2002) revealed that Australian firm leverage needs varied with different levels of managerial ownership. The study established a non-linear invert between managerial ownership and capital structure. Pöyry and Maury (2010) investigated manufacturing firms operating in Russia. The study found that firms with more concentrated ownership firms used more debt, indicating a preference for internal funding. Ganguli (2013) found that leverage is positively associated with concentrated majority shareholding and negatively related to diffused equityholding. Al-Najjar and Taylor (2008) investigated the interaction between ownership structure and financial decisions of Jordanian firms from the period 1994-2003. The study stated both capital structure and ownership structure share many common determinants like asset tangibility, growth and size. Burgstaller and Wagner (2015) argued that Small and Medium-sized Enterprises (SMEs) were more leveraged due to factors like long-term control and limited financing options. The study argued that SMEs followed the Pecking order theory rather than the Agency Theory. Sun *et al.* (2016) analysed the degree of conflict in ownership structure that can shape leverage ratio. The study showed an inconsistent link between Managerial share ownership and Institutional ownership. Bragoli *et al.* (2016) found that the financing choice of the firm in Italy depends on ownership concentration. The study also found firms with dispersed ownership relied on external financing but finance for R and D is met from equity financing. Manna *et al.* (2016) explored the influence of ownership patterns and board configuration. The result revealed a considerable liaison between corporate performance and shareholding framework variables. Chernenko (2019) found no direct relationship between oligarch ownership structure and leverage. According to Chernenko (2019), firms use leverage due to better access to debt. Tripathi's (2019) study supported the existence of Agency problems in the Indian Automobile Industry. The study found a significant positive association between factors of ownership and leverage. Feng *et al.* (2020) pointed out that ownership structure is unidirectionally related to debt ratio. The study indicated that Board Independence and Ownership patterns had a favourable impact on

leverage. Sony and Bhaduri (2021) highlighted the role of information asymmetry in making leverage choices. Ganguli and Deb (2021) highlighted high ownership concentration and board size enhance company performance and diluted ownership adversely impacts a firm's performance. Gurusamy (2024) found promoter's ownership and institutional ownership have a negative influence decision of leverage. On the contrary corporate ownership had a positive influence on leverage. After an in-depth literature survey, it was observed that various international studies have established the relationship between promoter ownership and leverage. Indian research has majorly focused on Indexed companies like Nifty Indexed, CNX Midcap, and BSE 100 Indexed. Very few quality research has been conducted in specific Industry. Hence, the present varies from past studies in terms of sample selection. The present study tries to fill this research gap and explore the liaison between promoter shareholding and leverage for FMCG companies in India.

3. Research Methodology

All BSE-listed FMCG companies are considered as the population of the study. For the study, the sample size was 46 FMCG companies. All FMCG companies listed with BSE falling in category A are selected. The select sample companies are also the biggest in terms of market capitalization. The five-year study period ranges from 2017-18 to 2021-2022. For the study data collected from secondary sources are used; a major source of data comes from the annual report of companies. Data was also collected from various reputed databases and various government reports. For testing the hypothesis, panel data analysis was applied. To choose the applicable panel model Lagrange Multiplier test, Redundant Fixed effect tests and Hausman test were conducted (Zulfiqar *et al.*, 2019).

3.1 Panel Data Analysis

3.1.1 Variable Description and Model Estimation

The study investigates the impact of promoter ownership on leverage. However, leverage is impacted by a numeral of other factors, hence, control variables are to be incorporated. Table 1 designates the variables in the model.

3.1.2 Hypothesis

H_0 There is no significant relationship between promoter ownership and the leverage of the Indian FMCG companies.

3.1.3 Model Estimation

Following panel regression models Pooled Effects Model (PEM), Fixed Effects Model (FEM) and Random Effects Model (REM) have been formed for analysis:

$$DER_{it} = \beta_{oi} + \beta_1 (PSH)_{it} + \beta_2 (TANG)_{it} + \beta_3 (LN\_SIZE)_{it} + \mu_{it}$$ _____PEM / FEM/ REM

β_o = common y-intercept
β_{oi} = the y-intercept of *i*
DER_{it} = Debt-equity ratio of it
PSH_{it} = Promoter ownership of *it*
$TANG_{it}$ = Fixed Assets Turnover Ratio of *it*
LN_SIZE_{it} = Working capital Turnover Ratio of *it*
$\beta_1 - \beta_4$ = coefficients of the explanatory and control variables
μ_{it} = the error term of *it*

4. Empirical Results and Discussion

4.1 Descriptive Statistics

Table 2 summarizes descriptive statistics showing minimum, maximum, mean and standard deviation of variables. The firm's mean leverage ratio is 0.5680, indicating healthy financial leverage of the sample companies, which is below the average of 0.94 reported in the works of Sun *et al.* (2016) and the standard deviation is 0.87307, and PSH means the value is 0.5819 indicating the sample firm's ownership structure are concentrated as 58% of the ownership stake is held by the promoters. Which means a significant proportion of ownership is concentrated. The mean of Tangibility is 0.3226 indicating the stability of the sample firms.

4.2 Correlation Analysis

Table 3 demonstrates the correlation matrix. The DER is positively correlated with the PSH. The DER is negatively correlated with SIZE and positively correlated with TANG. Among the control variables, Tangibility and Size are positively correlated.

4.3 Test of Normality

Tale 4 presents the Normality test, all the non-normal variables were normalized to alleviate the outliers effect by applying the Inverse Density Function (IDF) Normal method. The Kolmogrov-Sminrnov test and Shaprio-Wilk were conducted to check the normality of the data. The result shows data is normal (Table 4).

4.4 Test of Stationarity

Table 5 presents Levin, Lin and Chu unit root test results conducted to check the stationarity of data. The result shows normal data and is not influenced by time series.

4.5 Choice of the Panel Model

Panel Model is used as it provides a better estimation of causal relationship and also provides better information of data. It provides better results than the OLS regression methodology (Dawar, 2014). As presented in Table 6, to choose the appropriate model Lagrange Multiplier test (LM), the Redundant Fixed Effect test (RFE) and the Hausman test are conducted (Zulfikar *et al.*, 2019). Firstly, the LM test is conducted to select either a pooled least square or random effect model. The significant results indicate choosing the Random effect model highlighting the significant effect of heterogeneity. This indicates that FMCG firm's differences are important in determining leverage and ownership patterns. Then Redundant fixed effect test is conducted to choose between the pooled square model and the fixed effect model. The test result also indicates a choice of the fixed effect model. Lastly, the Hausman test is conducted to choose between a panel of fixed and random effect models. The result depicted that $p>0.05$; hence the Random effect model is chosen. This indicates that the mean of differences is normally distributed and the nature is random (Al-Najjar & Taylor, 2008).

Table 1. Description of variable

Variables	Description and formula	Source
DER	Debt equity ratio is a dependent variable. Debt equity represents leverage.	Abor (2007) ; Chadha & Sharma (2015)
PSH	Promoter ownership is an Independent variable. Promoter ownership to total shareholding is a measure of promoter shareholding.	Brailsford *et al.* (2002); Ganguli (2013)
TANG	Tangibility is a control variable. Fixed asset/total assets	Bhayani (2005); Serrasqueiro & Nunes (2012)
LN_SIZE	Size is a control variable. Natural logarithm of total assets	Harris & Raviv (1991); Bhole & Mahakud (2004)

Source: Authors' estimation

Table 2. Descriptive statistics

	Min	Max	Mean	SD
DER	-1.89	2.99	0.57	0.87
PSH	0.20	0.98	0.58	0.17
LN_SIZE	5.42	10.89	8.05	1.00
TANG	-0.09	0.83	0.32	0.18

Source: calculated from secondary data

Table 3. Correlations

		DE_Ratio	PSH	TANG	LN_Size
DER	Pearson Correlation	1			
	(two-tailed) Sig.				
PSH	Pearson Correlation	0.274**	1		
	(two-tailed)Sig.	0.000			
TANG	Pearson Correlation	0.149*	0.054	1	
	(two-tailed)Sig.	0.024	0.414		
LN_Size	Pearson Correlation	-0.127	0.037	0.151*	1
	(two-tailed) Sig.	0.055	0.579	0.022	
** 0.01 significance					
* 0.05 significance					

Source: calculated from secondary data

Table 4. Test of normality

	Kolmogorov-Smirnov		Shapiro-Wilk	
	Statistic	Sig.	Statistic	Sig.
DER	0.133	0.000	0.961	0.000
PSH	0.039	0.200*	0.992	0.230
TANG	0.029	0.200*	0.996	0.842
LN_Size	0.016	0.200*	0.998	0.997
*lower bound of the true significance.				

Source: calculated from secondary data

Table 5. Test of stationarity

Variable	Test statistics at the level	p-value
PSH	-4.96145	0.0000
DER	-17.5705	0.0000
LOG SIZE	-9.72847	0.0000
TAN	-6.44100	0.0000

Source: calculated from secondary data

5. Panel Data Analysis- FE-Model and RE-Model

Table 7 provides the panel model result of the Fixed Effect Model (FEM) and the Random Effect Model (REM) where the dependent variable is Leverage and Promoter shareholding is the independent variable. All the variables namely Promoter holding (PSH), Tangibility (TANG) and Firm size (LN_SIZE) are significant at a 5% level of significance. The null hypothesis declaring there is no significant association exists between dependent variable leverage and independent variable promoter ownership is rejected. The result suggests a significant positive relationship between leverage and promoter ownership which supports the agency theory of capital structure (Jensen & Meckling, 1976; Rajan & Zingales, 1995; Bhadhuri, 2002). The result also suggests a positive association between the dependent and independent variable Tangibility and a negative relationship with firm size. The positive relationship of leverage with asset tangibility shows the capability of the firm to use its assets as collateral for debt requirements (Al-Najjar & Taylor, 2008). The result shows a negative result with firm size depicting the minimum risk of bankruptcy of firms (Al-Najjar & Taylor, 2008).

The results, as seen in Table 7 R^2 value of 0.12 shows the model's combined effect in explaining the 12% deviation in the DER due to the explanatory variable. The F- statistics value agrees with the fitness of the model. The finding of the study aligns with studies of Manna *et al.*, (2016), Tripathi (2019), Feng *et al.* (2020) and Sony and Bhadhuri (2021) Some previous studies have pointed out no relationship between ownership structure and leverage (Chernenko, 2019) others have argued the existence of negative relationship (Gurusamy, 2024; Ganguli & Deb, 2021).

Table 6. Choice of the panel model

Lagrange Multiplier Test			
Null Hypothesis: No effect Alternative Hypothesis: Two-sided (Breuch-Pagan) and one-sided alternatives			
Breusch-Pagan	220.6659/0.0000	1.345807/0.2460	222.0117/0.0000
The test suggests the choice of the Random effect model.			
Redundant Fixed Effect Tests			
Effect Test	**Statistic**	**Prob. value**	
Cross-section F	13.389314	0.0000	
Cross-section Chi-square	336.529588	0.0000	
The test suggests the choice of a Fixed effect model.			
Hausman Test			
Cross-section random		**Statistics**	**Prob. value**
	1.067811	0.7848	
The test suggests the choice of a Random effect model.			

Source: calculated from secondary data

6. Diagnostic Test

The Diagnostic test- VIF (Variance Inflation Factor) depicts variance of an estimated regression coefficient rises if the predictors are correlated. The recommended maximum level of VIF is 5. The result of VIF values as presented in Table 8, is below 5 which is acceptable and confirms the absence of multicollinearity among the variables (Gujarati & Porter, 2021).

Table 7. Panel Model

Variable	FEM			REM		
	Coefficient	Std. error	t-statistics	Coefficient	Std. error	t-statistics
C	0.617224	0.485354	1.271699	0.641340	0.482470	1.329285
PSH	1.415471	0.329337	4.297945*	1.422151	0.329114	4.321149*
TANG	0.745061	0.312257	2.386054*	0.740061	0.311715	2.374157*
LN_SIZE	-0.137941	0.056581	-2.437959*	-0.141212	0.056054	-2.519222*
R-squared (R^2)	0.123102			0.117815		
F-statistics	4.432113			10.01615		
Prob (F-statistics)	0.000125			0.000003		

* significant at 5% level

Source: calculated from secondary data

6.1 Multicollinearity Test-VIF

Table 8. Multicollinearity Test-Vif

Variable	Variance Inflation Factor (VIF)
C	NA
PSH	1.006111
TANG	1.022333
LOG SIZE	1.020184

Source: calculated from secondary data

6.2 Auto-Correlation Test

Durbin Watson test is conducted to check the auto-correlation problem. Auto-correlation test detects the existence of the correlation between adjacent error terms. If the Durbin Watson value falls between the ranges -2 to +2, suggesting no auto-correlation (Gujarati & Porter, 2021).

6.3 Durbin Watson Test

Table 9. Auto-correlation test

DW test	FEM	REM
	0.522	0.529

Source: calculated from secondary data

7. Conclusion

Many researchers have tested the relationship between leverage and ownership structure and found an association between the two. The percentage of the promoters of the sample companies revealed that the sample companies are closely held companies. The positive association between leverage and promoter ownership indicates the existence of an agency problem. Firms try to mitigate agency problems by availing debt. Agency theory identifies the gap between the owner and management of the firm. The managers prioritize their interests before shareholders' interests also concentrated ownership patterns augment management control, leading to reduced agency costs (Jensen & Meckling, 1976). The agency problem can be dealt with by increasing debt level (Pinegar & Wilbricht, 1989). Debt usage preserves ownership structure from dilution (Stulz, 1990). Increasing debt levels will prevent managers from selecting projects with negative NPV due to debt obligation of repayment. Due to the existence of agency problems, the leverage decisions deviate from neoclassical models. The finding adds to the extant literature on ownership structure.

For future research analyses can be conducted incorporating other shareholding patterns like Institutional shareholders, Creditors, Foreign promoters, etc. with data collected for a greater period and also by increasing the number of variables. There are a few limitations of the study in terms of sample size, period of study, etc. It is recommended that firms try to reduce Agency problems as it has an adverse impact on the performance of the companies. The stakeholders are suggested to deliberate on the key issues highlighted in the study while designing their optimal leverage ratio.

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