Board characteristics, corporate governance and agency problems in Indian companies

T. Venugopalan

Department of Commerce,
Sri Guru Tegh Bahadur Khalsa College,
University of Delhi,
Delhi, India
Email: venugopalan@sgtbkhalsa.du.ac.in

Abstract: This research paper explores how the board characteristics and other external governance mechanisms mitigate the agency conflicts prevailing in the Indian corporate sector based on panel data of 315 companies drawn from the BSE 500 index (Bombay Stock Exchange) during the period 2008–2018. Utilising the panel OLS regression methodology, this research paper has derived two alternative econometric models based on the proxies of agency cost (operating ratio and Tobin's Q) as dependent variables and the independent variables as the board size, independent directors, CEO-Chairperson separation, audit committee, nomination, and remuneration committee, stakeholders' relationship committee, promoters' holdings, leverage, bank debt, and firm size. The descriptive statistics establish that the Indian companies are subjected to severe agency problems. The multivariate regression results reveal that the board characteristics as governance mechanisms are not successful in mitigating agency conflict in Indian companies. However, Indian companies have been gradually assimilating corporate governance mechanisms.

Keywords: agency theory; agency cost; growth options; leverage; corporate governance; stockholders.

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Biographical notes: T. Venugopalan is an Assistant Professor in the Department of Commerce, Sri Guru Tegh Bahadur Khalsa College, University of Delhi. He received his master's degree from the University of Calicut, Kerala, and a PhD from the Faculty of Management Studies (FMS), University of Delhi. His area of specialisation is accounting and finance. His research interest is confined to corporate finance, corporate governance, sustainable development, and tourism management.

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1 Introduction

The corporate world has witnessed numerous corporate scandals and collapses, which not only spread economic devastation but also dwindled the confidence of investors in the financial markets across the world. Investigations conducted across the world revealed that the failure of corporate governance mechanisms had led to corporate scandal and the eventual collapse of corporations. The agency cost theory provides a rational explanation for corporate failures. According to Jensen and Meckling (1976) "the separation of ownership and management in joint-stock companies result in the conflict of interests between managers and stakeholders". When the shareholders sanction the management to manage and administer assets of the firm, there is bound to have a conflict of interest between these stakeholders because the managers' objectives contradict with the wealth maximisation objectives of shareholders (Venugopalan and Shaifali, 2018). When the managers become entrenched and self-centred, they maximise personal wealth illegitimately by pursuing strategies to derive excessive managerial perquisites out of the resources of the firm or by undertaking suboptimal investment decisions that transfer wealth from other stakeholders to shareholders. This is called the agency problem. The agency conflicts can be reduced by incurring agency costs in the form of monitoring cost and contracting cost (Jensen and Meckling, 1976). The empirical research has established that agency costs can be mitigated by adopting various internal and external corporate governance mechanisms (Renneboog, 2000; Burkart et al., 1997; Wiesbach, 1998; Jackson, 2010).

Cadbury Report (1992) defines that "corporate governance is the system by which companies are directed and controlled". "The corporate governance mechanisms are economic and legal institutions that can be transformed by the political process, which assure the investors who sunk capital that, the investments are safe and would get a reasonable rate of return by monitoring and controlling the managers" (Shleifer and Vishny, 1997). Good governance refers to the integrated system of management processes, policies, laws, and regulations which are devised to control and regulate the operations of corporations for protecting and safeguarding the interests of shareholders and other stakeholders (Nguyen et al., 2020). The board characteristics such as the size of the board, composition of independent directors, audit committee, stakeholder's relationship committee, nomination, and remuneration committee, corporate social responsibility committee, and risk management committee are some of the effective internal corporate governance mechanisms which can mitigate the agency problems (Jensen and Meckling, 1976; Ang et al., 2000; McKnight and Weir, 2009; Venugopalan and Madhu, 2013).

The Indian corporate sector is characterised by a complex industry structure in which a large number of family-controlled firms, public and private companies, numerous state-owned huge enterprises, and opaque firms co-exist (Khanna and Pradyot, 2008). The complex industry structure and imperfect financial market conditions coupled with the weaknesses prevailing in the legal systems and complicated regulatory mechanisms have magnified the gravity of agency conflicts among various stakeholders. Hence, for bringing in good governance in Indian companies and disciplining entrenched and self-centred managers, the Securities and Exchange Board of India (SEBI) and Ministry of Corporate Affairs (MCA) had adopted and implemented various governance codes in line with the global initiatives on corporate governance such as the 'code of best practices of corporate governance' developed by Cadbury Report, Sarbanes-Oxley Act, OCED

Principles of Corporate Governance, etc. However, the Indian Companies Act 2013 is a watershed in the history of corporate governance in India, which incorporated various mandatory provisions to strengthen the board of directors and board committees such as board size, the composition of independent directors, audit committee, stakeholders' relationship committee, nomination, and remuneration committee, etc. for bringing about good governance in Indian corporate sector.

Internationally, financial management literature is dominated by research on agency conflicts and corporate governance. In India, there is limited studies have been conducted in the domain of agency conflicts and corporate governance, especially on the impact of various legal and regulatory provisions of the corporate governance system on agency conflicts prevailing in corporations. Hence, this research paper attempts to empirically examine the agency problems, various internal and external governance mechanisms, and the effectiveness of the legal and regulatory provisions on corporate governance mechanisms in mitigating agency problems in the Indian companies. This research paper may contribute immensely to the existing literature because it comprehensively examines the nature and extent of agency problems and the impact of governance mechanisms on the agency conflicts in Indian companies using panel OLS regression methodology.

The main objectives of this research paper are to investigate the nature and magnitude of agency problems prevailing in Indian companies, and empirically evaluate the efficiency and effectiveness of the board characteristics as internal governance mechanisms in mitigating the agency problems. For empirically examining the board characteristics and agency problems, the panel ordinary least square (OLS) regression methodology has been employed on a panel data of 315 companies that were derived from the BSE 500 index (Bombay Stock Exchange) for the period 2008 to 2018. The research findings conclude that the board characteristics as governance mechanisms could not provide substantial help to alleviate agency problems and bringing in good governance in Indian companies.

This paper is organised as follows: Section 1, introduction, provides a synoptic view of the research including the research problem, rationale of the research, and the research objectives. Section 2, review of the literature, gives a discussion about the previous research on agency problems and corporate governance. Section 3, research methodology, describes the sample, methods, and materials adopted for measuring the variables and analysing the data. Section 4, data analysis and discussion, verifies empirically the research hypotheses using descriptive statistics, Pearson's correlation coefficients, and regression analysis. Section 5, conclusion, concludes the research paper and discusses the limitations of the research and the future directions for research.

2 Review of literature

In this section, a brief deliberation is made on the empirical works conducted across the world on agency cost and board characteristics.

2.1 Agency cost

For the last six decades, the corporate finance literature has been dominated by the agency problems triggered by the imperfect alignment of contradicting objectives of various stakeholders in modern corporations. The agency cost is manifested in the form

of a manager's shirking of responsibility, employing insufficient effort for maximising the turnover and revenues, consumption of excessive perquisites, employee stock options, and other non-value maximising conducts (Jensen and Mackling, 1976; Ratnam, 2019). The operating ratio (OPERATING RATIO) and Tobin's Q (TOBIN'S Q) are the commonly used proxies for representing agency costs. The operating ratio or expense ratio describes how efficiently the management controls operational costs, including the disproportionate consumption of perquisites and other direct agency costs (Singh and Davidson, 2003). Tobin's Q represents the agency cost induced by the growth options available in a firm's investment avenues. Companies having enormous growth options in the investment opportunity set may experience a high level of agency conflict between various stakeholders while exercising these investment opportunities (Venugopalan and Shaifali, 2018; Myers, 1977; Barnea et al., 1980; Venugopalan and Madhu, 2013).

2.2 Board characteristics

The extant literature on corporate finance established that the board size, independent directors, CEO and chairperson separation, audit committee, stakeholders' relationship committee, and nomination and remuneration committee are the significant internal governance systems, which can mitigate agency problems in the corporations (Venugopalan and Shaifali, 2018). The large-sized boards are less effective and react slowly to decisions that require immediate remedial actions (Jensen, 1996). Large boards also seldom use their capabilities to direct the firm during the decisive situations and the directors become candid in criticising one another during exigencies, making the board less efficient in decision making. On the contrary, the small boards are less vulnerable to agency problems because they are structured and functional, superior in decision making, less influenced by dominant groups, value-oriented towards shareholders, and enjoy more flexibility and quickness in restructuring incentive contracts with executive directors (Venugopalan and Shaifali, 2018; Shleifer and Vishny, 1997; Lasfer, 2002; Gouiaa, 2018). Hence, a direct relationship is expected between board size (BOARDSIZE) and agency cost.

The independent directors, who represent the shareholders' interest can augment board performance and reduce agency problems in business organisations (Jackson, 2010; Renneboog, 2000). The high representation of independent directors will strengthen the monitoring capability of the board and lowering the dominance of management (Renneboog, 2000). Hence, a negative relationship is predicted between the agency cost and independent directors (INDIRECTOR). The separation of the posts of the chief executive officer (CEO) and the board chairperson and the appointment of an independent director as the board chairperson can prevent the concentration of excessive power in the board rooms (McKnight and Weir, 2009; Faccio and Lasfer, 2000) The non-executive chairperson could guarantee more independence to board members, limit the dominance of the chief executive officer over the board decision-making process, reinforce the monitoring ability of the board, improve board performance, and reduce the agency problems (Renneboog, 2000; Hermalin and Weisbach, 1991; Palaniappan, 2017). Thus, this paper predicts a negative relationship exists between CEO-chairperson separation (SEPARATION) and agency cost.

The audit committee is one of the most powerful governance mechanisms, which acts as a deterrent against the financial irregularities and frauds that may be committed by dishonest management (Varma, 1997). The mandate of an audit committee is to provide

support to the board in evaluating the financial performance and auditing process and appraising the accounting system and financial reporting processes. Hence, a negative relationship is expected between the audit committee (AUDICOM) and agency cost. The block holders or large shareholders who have acquired substantial control in the management of the corporations may indulge in self-defeating expropriation activities, which might be detrimental to the marginal shareholders (Shleifer and Vishny, 1997; Venugopalan and Shaifali, 2018). The expropriation incentives become larger and the choice between cash flow rights and control rights of block holders will be enormous when the legal and regulatory mechanisms fail to protect the small shareholders (Grossman and Hart, 1986). The stakeholders' relationship committee is an important governance mechanism, which explicitly addresses the grievance of shareholders safeguard them from the alleged oppression and mismanagement by dominant groups. This paper hypothesises an inverse relationship between the agency cost and stakeholders' relationship committee (STAKECOM).

The nomination and remuneration committee is another important governance mechanism, which maintains a check on excessive remuneration of directors and recommends the appointment of directors. It establishes an impartial and transparent process for nominating directors and prescribing the remuneration level of the executive directors and other independent directors (McKnight and Weir, 2009). While recommending the executive remuneration package, the committee is expected to ensure that the selection process of directors and remuneration arrangements of directors and other senior officials correspond with the strategic business objectives of the firm (Jackson, 2010; Varma, 1997). Hence, an inverse relationship is predicted between agency cost and nomination and remuneration committee.

2.3 External corporate governance mechanisms

This research paper has included various external governance mechanisms such as concentrated ownership, leverage, bank debt, and firm size as control variables, which also reduce the agency problems in organisations. Concentrated ownership can limit the expropriation of investors because they may have enough encouragement to sustain the fixed cost of obtaining information, which is necessary for effectively controlling and disciplining the management (Renneboog, 2000). This research paper has used promoters' holdings to total shareholdings as a proxy for representing ownership concentration. Thus, a negative relationship exists between promoters' holdings (PROMHOLD) and agency costs. The leverage or external debt finance in the financial structure of a firm is another external governance mechanism that can effectively monitor and control the management and thereby reduce the agency cost (Shleifer and Vishny, 1986). Therefore, an inverse association is expected between leverage (LEVERAGE) and agency cost. The bank debt can alleviate information asymmetry and agency costs because the bank debt integrates significant signalling information about the creditworthiness of the borrowers (Venugopalan and Madhu, 2013). Therefore, a negative association is expected between bank debt (BANKDEBT) and agency cost. Large-sized firms with huge future investment opportunities or growth options are expected to face severe agency problems caused by the divergence of wealth maximisation objectives of managers, creditors, and shareholders while investing in these growth opportunities (Myers, 1977; Venugopalan and Madhu, 2013). Hence, a direct relationship is expected between the firm size (FIRMSIZE) and agency cost.

2.4 Summary of research hypothesis

From the review of literature, this paper has formulated ten alternative hypotheses to empirically test and verify how board characteristics as governance mechanisms mitigate agency problems in Indian companies:

Hypothesis 1 Board size (BOARDSIZE) is directly related to agency cost.

Hypothesis 2 Independent directors (INDIRECTOR) is negatively related to agency cost.

Hypothesis 3 CEO-chairperson separation (SEPARATION) is negatively related to agency cost.

Hypothesis 4 Audit committee (AUDICOM) is negatively related to agency problems.

Hypothesis 5 Stakeholders' relationship committee (STAKECOM) is negatively related to agency cost.

Hypothesis 6 Nomination and remuneration committee (REMUCOM) is inversely related to agency cost.

Hypothesis 7 Promoters' holdings (PROMHOLD) is inversely related to agency cost.

Hypothesis 8 Leverage (LEVERAGE) and agency cost are inversely related.

Hypothesis 9 Bank debt (BANKDEBT) and agency cost are negatively related.

Hypothesis 10 Firm size (FIRMSIZE) is directly related to agency cost.

3 Research methodology

The empirical examination of the board characteristics and agency cost is performed by using panel ordinary least square (OLS) regression methodology on a secondary data generated from PROWESS, the database of the Centre for Monitoring Indian Economy (CMIE). The sample is derived from the BSE 500 index that embodies more than 90% of the market capitalisation of the Bombay Stock Exchange (BSE). Excluding the financial companies and companies with missing information, a panel dataset of 315 companies was created by pooling cross-sectional and time-series data. This research is delimited to a period of 10 years commencing from 2008 to 2018. The database is compassed of 3,150 observations, representing 315 companies spanning over 10 years. The specifications tests are performed for ascertaining the assumptions of best linear unbiased estimators. The examination reveals that the dataset fulfils the normality assumptions. The incidence of autocorrelation, heteroskedasticity, and cross-sectional dependence were examined by employing the Wooldridge test, modified Wald statistics, and Pesaran CD test. The fixed effect regression and random effect regression are the alternative panel OLS regression methods and the feasibility of a suitable method has been evaluated by using the Hausman test. Hausman test proves that the fixed effect regression is the suitable approach for the data analysis. The descriptive statistics, Pearsons' correlation coefficients, and regression analysis have been used for the empirical examination of board characteristics and agency problems in the Indian companies.

3.1 Variable measurement

- *Dependent variable*

  Agency cost: this paper has used two alternative proxies for measuring agency cost; operating ratio and Tobin's Q. These proxies are derived as follows:

  1. Operating ratio (OPERATING RATIO) = $\frac{OPERATING\ EXPENSES}{ANNUAL\ SALES}$
  2. Tobin's Q (TOBIN'S Q) = $\frac{MARKET\ VALUE\ OF\ THE\ FIRM}{BOOK\ VALUE\ OF\ THE\ FIRM}$.

- *Independent variables*

  This paper has identified ten independent variables as proxies of both internal and external governance mechanisms, which are derived as follows:

  1. Board Size (BOARDSIZE) = total number of directors in the board
  2. Independent Directors (INDIRECTOR) = $\frac{INDEPENDENT\ DIRECTORS}{TOTAL\ DIRECTORS}$
  3. CEO-Chairperson Separation (SEPARATION) = binary variable 1 if the posts of CEO and chairman of the board are held by different persons and 0 otherwise
  4. Audit Committee (AUDICOM) = number of members appointed in the audit committee
  5. Stakeholders' Relationship Committee (STAKECOM) = number of meetings held by the stakeholders' relationship committee during the financial year
  6. Nomination And Remuneration Committee (REMUCOM) = number of meetings held by the nomination and remuneration committee during the financial year
  7. Promoters' Holdings (PROMHOLD) = $\frac{PROMOTER'S\ EQUITY\ HOLDING}{TOTAL\ EQUITY\ SHARES}$
  8. Leverage (LEVERAGE) = $\frac{DEBT}{TOTAL\ CAPITAL}$
  9. Bank Debt (BANKDEBT) = $\frac{BANK\ DEBT}{TOTAL\ DEBT}$
  10. Firm Size (FIRMSIZE) = natural logarithms of firm's market value (MV).

This research paper has derived two alternative econometric models based on the proxies of agency cost OPERATING RATIO and TOBIN'S Q, for examining the influence of board characteristics on the agency cost. These models are specified below.

1. $OPERATING\ RATIO = \beta o + \beta 1(BOARDSIZE) + \beta 2(INDIRCTOR) + \beta 3(SEPARATION) + \beta 4(AUDICOM) + \beta 5(REMUCOM) + \beta 6(STAKECOM) + \beta 7(PROMHOLD) + \beta 8(LEVERAGE) + \beta 9(BANKDEBT) + \beta 10(FIRMSIZE) + \varepsilon i$

2 $TOBIN'S\ Q = \beta o + \beta 1(BOARDSIZE) + \beta 2(INDIRCTOR) + \beta 3(SEPERATION) + \beta 4(AUDICOM) + \beta 5(REMUCOM) + \beta 6(STAKECOM) + \beta 7(PROMHOLD) + \beta 8(LEVERAGE) + \beta 9(BANKDEBT) + \beta 10(FIRMSIZE) + \varepsilon i.$

4 Data analysis and discussion

4.1 Descriptive statistics

The mean, standard deviation, minimum, and maximum are used to explain precisely the nature of agency costs and governance mechanisms.

Table 1 Descriptive statistics

Variables	*Mean*	*Standard deviation*	*Minimum*	*Maximum*
OPERATING RATIO	81.99	14.23	–3.15	154.93
TOBIN'S Q	3.88	4.78	–27.83	58.08
BOARDSIZE	10.06	3.19	2.00	26.10
INDRIECTOR	48.86	1P5.58	0.00	90.91
SEPARATION	0.84	0.37	0.00	1.00
AUDICOM	4.71	1.89	0.00	14.00
STAKECOM	0.40	0.49	0.00	1.00
REMUCOM	0.55	0.50	0.00	1.00
PROMHOLD	55.29	16.54	0.00	99.59
LEVERAGE	0.21	0.19	0.00	1.59
BANKDEBT	0.58	0.37	0.00	1.00
FIRMSIZE	10.06	1.43	5.17	15.43

Source: Prowess Database

Table 1 shows that the mean and standard deviation of OPERATING RATIO are 81.99 and 14.23, respectively, which disclose that there is a wide disparity in the operating ratio among the firms. This concludes that the higher the operating ratio higher the managerial control over the operating expense and the larger the chances of having agency conflict between managers and shareholders. However, the average and standard deviation of TOBIN'S Q (3.88 and 4.78) reveal that the firms in the sample are having high growth options and they may be subjected to high agency problems between managers, creditors, and shareholders while exercising these growth options.

The average value and standard deviation of board size (BOARDSIZE) are 10.06 and 3.29 respectively describe that the Indian companies are having large-sized boards. The descriptive statistics show that the independent directors (INDIRECTOR) are composed of 48.86% of the total board members with a standard deviation of 15.58. The high composition of independent directors on the board is expected to reduce the agency cost. The mean value of SEPARATION 0.84 proves that 84% of companies have adopted in principle the separation of the posts of CEO and chairperson of the board. The mean value 4.71 of AUDICOM reveals that the audit committee is composed of approximately five directors. Further, the data show that all firms have constituted audit committees for ensuring impartial and independent evaluation of the financial operation and accounts of the firms.

The descriptive statistics reveal that the stakeholder's relationship committees (STAKECOM) have conducted less than one meeting per year (0.40) during the study period to discuss the matters regarding the rights and privileges of shareholders and to redress the grievances of minority shareholders. Similarly, the nomination and remuneration committees (REMUCOM), which is entrusted with the task of nominating the directors and determining the executive compensation, have held less than one meeting (0.55) per year during the sample period. The average value of promoters' holdings (PROMHOLD) is 55.29, which reveals that promoters hold more than 55% of the equity shares in the Indian companies. The mean value of leverage (LEVERAGE) is 0.21, which shows that Indian companies have employed 21% of total capital through debt capital. The mean value of bank debt (BANKDEBT) indicates that 58% of total debt capital is contributed by the banks and financial institutions. The mean firm value of firm size (FIRMSIZE) is 10.06, which demonstrates that the sample is predominantly composed of large firms.

4.2 Correlation analysis

Table 2 exhibits the Pearson's correlation coefficients, which measure the magnitude and direction of the association between the agency cost and the governance mechanisms.

Table 2 illustrates that the Pearson's correlation coefficients on the independent directors (INDIRECTOR), CEO-chairperson separation (SEPARATION), nomination and remuneration committee (REMUCOM), leverage (LEVERAGE), and firm size (FIRMSIZE) establishes significant and positive correlation with the agency cost (OPERATING RATIO). However, the correlation coefficients on board size (BOARDSIZE), stakeholders' relationship committee (STAKECOM), promoters' holdings (PROMHOLD), and bank debt (BANKDEBT) are significant and negatively associated with the agency cost (OPERATING RATIO). The correlation coefficients on the audit committee (AUDICOM) are negative but insignificantly related to operating ratio (OPERATING RATIO).

Table 2 Pearson's coefficient of correlation

Variables	*Operating ratio*	*Tobin's Q*
OPERATING RATIO	1.0000	
TOBIN'S Q		1.0000
BOARDSIZE	–0.0540*	–0.0505*
INDIRECTOR	0.0463*	–0.0585*
SEPARATION	0.0169*	0.0218*
AUDICOM	–0.0052	–0.0021
STAKECOM	–0.0201*	–0.0300*
REMUCOM	0.0667*	0.0140*
PROMHOLD	–0.1069*	0.1914*
LEVERAGE	0.1280*	–0.2692*
BANKDEBT	–0.0320*	0.0765*
FIRMSIZE	0.0778*	0.0401*

Note: t-statistics are reported in the parentheses below parameter estimates: *p < 0.10.

Source: Prowess Database

Table 2 depicts that the correlation coefficients on the board size (BOARDSIZE), independent directors (INDIRECTOR), stakeholders' relationship committee (STAKECOM), and leverage (LEVERAGE) are negative and significantly correlated to the agency cost (TOBIN'S Q). However, the coefficients on CEO-chairperson separation (SEPARATION), nomination and remuneration committee (REMUCOM), promoters' holdings (PROMHOLD), bank debt (BANKDEBT), and firm size (FIRMSIZE), are directly and significantly related to the agency cost (TOBIN'S Q). The correlation coefficient on the audit committee (AUDICOM) is negative but insignificantly related to agency cost (TOBIN'S Q).

4.3 Regression analysis

The main objective of this research paper is to examine the effect of board characteristics as internal governance mechanisms on the agency cost using the fixed effect regression method. Table 3 exhibits the multiple regression results on board characteristics and agency problems. The first column contains the independent variables, the second column shows the predicted signs of empirical hypotheses, the third column displays the coefficients, standard errors, and t-values from model 1 on OPERATING RATIO and the last column shows the regression coefficients, standard errors, and t-values from model 2 on TOBIN'S Q.

Table 3 Fixed effects regression on board characteristics and agency cost

Variables	*Predicted sign*	*Model 1*	*Model 2*
		Operating ratio	*Tobin's Q*
BOARDSIZE	+	–.47254899* .23826658 (–1.98)	–.11074916 .06298195 (–1.76)
INDIRECTOR	–	.01048909 .04376292 (0.24)	–.00098533 .0119363 (–0.08)
SEPARATION	–	.8085248 2.105803 (–0.38)	.44869187 .43017828 (–1.04)
AUDICOM	–	–.21260339 .28987572 (0.73)	–.04403902 .07738642 (0.57)
STAKECOM	–	–.87457088 1.0092248 (–0.87)	–.02672279 .30605466 (–0.09)
REMUCOM	–	1.3741724 1.3068966 (1.06)	.04290047 .37032319 (0.12)
PROMHOLD	–	–.07234108 .05682571 (–1.27)	.05407337*** .010218 (5.29)

Note: Heteroskedasticity, autocorrelation and cross-sectional dependence consistent t-statistics are specified in the parentheses below parameter estimates: *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Source: Prowess Database

Table 3 Fixed effects regression on board characteristics and agency cost (continued)

Variables	*Predicted sign*	*Model 1*	*Model 2*
		Operating ratio	*Tobin's Q*
LEVERAGE	–	9.4124529** 3.510135 (2.68)	–6.0483748*** 1.1762054 (–5.14)
BANKDEBT	–	–.58551471 1.3998946 (–0.42)	.93854235* .43890777 (2.14)
FRMSIZE	+	1.0701145* .42575212 (2.51)	.2817129 .15080325 (1.87)
INTERCEPT		77.94927*** 9.0380949 (8.62)	–.10196549 1.7530639 (–0.06)
R2		0.82	0.66
ADJUSTED R2		0.80	0.62
N		31,50	3,150

Note: Heteroskedasticity, autocorrelation and cross-sectional dependence consistent t-statistics are specified in the parentheses below parameter estimates: *p < 0.05, **p < 0.01, ***p < 0.001.

Source: Prowess Database

4.3.1 Board characteristics and agency problems

Board size (BOARDSIZE)

Table 3, model 1 shows that the regression coefficient on BOARDSIZE and OPERATING RATIO (β = –.47254899, se = .23826658, t = –1.98) is significant but negative as against the empirical prediction of a direct relationship between board size and agency cost. The descriptive statistics show that Indian companies are characterised by large boards and firms with large sized boards may be subjected to severe agency problems. The significant but negative regression coefficient on board size (BOARD SIZE) and agency cost (OPERATING RATIO) perhaps leads to the conclusion that the large boards are productive in decision making and effective in monitoring and disciplining the management and thereby mitigating agency problems. (Pearce and Zahra, 1991) On the contrary model 2 on TOBIN'S Q, displays that the coefficient of BOARDSIZE and TOBIN'S Q is negative but insignificant (β = –.11074916, se = .06298195, t = –1.76), which reject the empirical prediction of a direct relation between board size and agency cost; the large-sized boards increase agency problems in the firms having high growth options in their investment opportunity set.

Independent directors (INDIRECTOR)

Model 1 shows that the regression coefficient on the INDIRECTOR and OPERATING RATIO (β = .01048909, se = .04376292, t = 0.24) is insignificant but positive. Similarly, model 2 also exhibits that the regression coefficient on INDIRECTOR and TOBIN'S Q is negative but insignificant (β = –.00098533, se = .0119363, t = –0.08). The insignificant

regression coefficients on independent directors (INDIRECTOR) from both models repudiate the empirical prediction that the independent directors (INDIRECTOR) and agency cost (OPERATING RATIO) are inversely related. The descriptive statistics reveal that about 48.86% of the board is composed of independent directors. Even though the boards are dominated by independent directors, they could not moderate the agency problems in Indian companies.

CEO-chairperson separation (SEPARATION)

model 1 displays that the regression coefficient on SEPARATION and OPERATING RATIO (β = –.8085248, se = 2.105803, t = –0.38) is insignificant and negative. Moreover, model 2 also establishes an insignificant and negative regression coefficient on SEPARATION and TOBIN'S Q (β = –.44869187, se = –.43017828, t = –1.04). The insignificant regression specifications on CEO-chairperson separation (SEPARATION) from both models summarily reject the empirical prediction that CEO-chairperson separation is inversely related to agency cost. The descriptive statistics reveal that a huge majority of the Indian firms have adopted the principle of separation of the posts of CEO and chairperson of the board. However, the regression results on CEO-chairperson separation (SEPARATION) reject the arguments that the separation of the posts of the board chairperson and chief executive officer may strengthen the monitoring ability of the board, improve the performance of the board and reduce agency problems (Renneboog, 2000; Hermalin and Weisbach, 1991; Shleifer and Vishny, 1997).

Audit committee (AUDICOM)

Model 1 shows the regression coefficient on AUDICOM and OPERATING RATIO (β = –.21260339, se = .28987572, t = –0.73), which is insignificant and negative. Model 2 also establishes an insignificant and negative association between the AUDICOM and TOBIN'S Q (β = –.04403902, se = .07738642, t = –0.57). The regression coefficients from both models on AUDICOM strongly repudiate the empirical prediction that the audit committee is negatively related to agency cost. The research findings fail to substantiate the arguments that the audit committee is one of the most powerful and well-established board committees, which act as a deterrent against financial irregularities and frauds, and it also enables the board to keep the pulse of the financial health of the company, Varma (1997). The research findings prove that as a powerful governance mechanism, the audit committee could not alleviate the agency problems predominate in the Indian companies (Venugopalan and Shaifali, 2018; Quick et al., 2018).

Stakeholders' relationship committee (STAKECOM)

Model 1 depicts that an insignificant and negative regression coefficient on STAKECOM and OPERATING RATIO (β = –.87457088, se = 1.0092248, t = –0.87). Model 2 also reports that the regression coefficient on STAKECOM and TOBIN'S Q (β = –.02672279, se = .30605466, t = –0.09) is negative and insignificant, which repudiate the empirical prediction that the stakeholders' relationship committee is inversely related to agency cost. The descriptive statistics reveal that the firms in the sample have failed to hold the mandatory two meetings in each financial year as prescribed in the Indian Companies Act

2013. The regression results on stakeholders' relationship committee (STAKECOM) reject the argument that the stakeholders' relationship committee is an important governance mechanism, which can decrease the agency problems and safeguard the minority shareholders from oppression and mismanagement by dominant groups.

Nomination and remuneration committee (REMUCOM)

The regression coefficient from model 1 on REMUCOM and OPERATING RATIO (β = 1.3741724, se = 1.3068066, t = 1.06) is insignificant but positive. Likewise, model 2 also discloses that the coefficient on REMUCOM and TOBIN'S Q is insignificant and positive (β = .04290047, se = .37032319, t = 0.12). The insignificant regression specifications from both models summarily reject the research hypothesis that nomination and remuneration committee (REMUCOM) and agency costs are negatively related. The descriptive statistics reveal that the firms in the sample could not even hold the mandatory minimum of two meetings of nomination and remuneration committee per financial year as provided in the Indian Companies Act 2013. The research findings from regression results reject the argument that the nomination and remuneration committee (REMUCOM) is an effective internal governance mechanism that can reduce the agency problems significantly (McKnight and Weir, 2009; Jackson, 2010; Varma, 1997).

4.3.2 External corporate governance mechanisms and agency problems

Promoters' holdings (PROMHOLD)

Model 1 displays that the regression coefficient on PROMHOLD and OPERATING RATIO (β = –.07234108, se =.05682571, t = –1.27) is insignificant and negative. However, the regression coefficient on PROMHOLD and TOBIN'S Q in the model 2 is statistically significant but positive (β = .05407337, se = .010218, t = 5.29) as against the direction of the empirical proposition that promoters' holdings and agency costs are negatively related; higher the holdings of promoters, higher the agency cost and vice versa.

The research findings prove that the ownership concentration as represented by promoters' holdings could not reduce agency problems in Indian companies.

Leverage (LEVERAGE)

Model 1 demonstrates that the regression coefficient on LEVERAGE and OPERATING RATIO (β = 9.4124529, se = 3.510135, t = 2.68) is significant but positive, which contradicts with the direction of the empirical research hypothesis that leverage is inversely related to agency cost. However, model 2 discloses that the coefficient on LEVERAGE and TOBIN'S Q (β = –6.0483748, se = 1.1762054, t = –5.14) is statistically significant and negative, which confirms that the leverage is an important external governance mechanism that significantly mitigates the agency problems in Indian companies.

Bank debt (BANKDEBT)

The regression coefficient on BANKDEBT and OPERATING RATIO from model 1, is insignificant but negative (β = –.58551471, se = 1.3998946, t = –0.42) which rejects the empirical hypothesis that agency cost and bank debt are inversely related. The coefficient on BANKDEBT and TOBIN'S Q (β = .93854235, se = .43890777, t = 2.14) from model 2 is positive and significant which contradict with the direction of the empirical prediction of an inverse relationship between agency cost and bank debt. The significant but positive regression coefficient on bank debt and agency cost reveals that bank debt has increased the agency problems in Indian companies.

Firm size (FIRMSIZE)

Model 1 shows that the coefficient on FIRMSIZE and OPERATING RATIO is significant and positive (β = 1.0701145, se =.42575212, t = 2.51), which strongly support the empirical prediction that agency cost is directly related to firm size. However, the regression coefficient on FIRMSIZE and TOBIN'S Q in model 2 is insignificant but positive (β = .2817129, se =.15080325, t = 1.87), which reject the research hypothesis that fir size is directly related to agency cost.

The research findings reveal the nature and extent of agency problems prevailing in companies and the efficacy of board characteristics as corporate governance mechanisms to deal with the endemic problem of agency conflicts. The descriptive statistics establish that Indian companies are subjected to high levels of agency costs due to the conflict of interest between various stakeholders. The multivariate regression results prove that the board characteristics such as the size of the board, composition of independent directors, separation of the posts of CEO and chairperson of the board, audit committee, stakeholder's relationship committee, and remuneration committee have not been successful in mitigating the agency cost due to the conflict of interest between managers and other stakeholders in the Indian corporate sector. Therefore, the Indian companies have to assimilate and implement the provisions of the Indian Companies Act 2013 in letter and spirit for making the boards and the board committees as powerful governance mechanisms to deal with the agency conflicts and bring about better governance in corporations.

5 Conclusions

This research paper has empirically investigated the nature of the agency problems and the effectiveness of board characteristics as internal governance mechanisms in mitigating the agency problems in Indian companies by utilising the panel OLS regression methodology. This paper has derived two econometric models based on the alternative proxies (OPERATING RATIO and TOBIN'S Q) for examining the efficiency of governance mechanisms in mitigating the agency problems. The regression results from the first model on OPERATING RATIO prove that the board size, leverage, and firm size have a significant impact in mitigating the agency conflicts. However, the independent directors, CEO-chairperson separation, audit committee, stakeholders' relationship committee, nomination and remuneration committee, promoters' holdings, and bank debt have no significant influence on agency cost. The second model on

TOBIN'S Q reveals that the promoters' holdings, leverage, and bank debt are viable external governance mechanisms that reduce agency problems in Indian firms. However, the board size, independent directors, CEO-chairperson separation, audit committee, stakeholders' relationship committee, and nomination and remuneration committee have no significant impact on the agency cost. Thus, the research findings disclose that the board characteristics as corporate governance mechanisms could not mitigate the agency conflicts prevailing in Indian companies. These findings lead to the conclusion that the Indian companies have to rigorously implement the legal and regulatory provisions in letter and spirit to bring about good governance.

This research is plagued by certain limitations that stem from the limitations of the accounting system as well as the methodological lacunae of panel OLS regression methodology. However, this paper has attempted to reduce these limitations to the minimum by applying rigorous tests for deriving unbiased results. An important extension to this research would be to investigate the impact of governance mechanisms on the agency problems during the post-Indian Companies Act 2013 regime. A comparative study of agency problems and board characteristics during pre- and post-Indian Companies Act 2013 regimes would reveal how effective are the provisions of Companies Act 2013 in reducing agency problems and bringing about better governance in Indian companies.

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