

Does Asymmetric Information Impact Shareholder's value positively or negatively?

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Purpose/objective

The objective of this study is to understand the impact of Asymmetric Information on Shareholder's value of a listed Indian entity.

Methodology

The study uses secondary data collected from World Bank and BSE Corporate Actions. A thorough analysis is done using the Correlation Matrix of Corporate Governance Indicators of India. The trend of governance indicators, emphasizing Voice and Accountability, are plotted for the nation. The behavioural patterns of these indicators are studied in-depth. Attendance % of shareholders at Annual General Meetings (AGMs) and Voting % of shareholders at AGMs, are taken as tools to understand the cause and effects of Asymmetric Information on shareholder's value.

Findings

There are few key findings in the study; *Voice and Accountability* of the citizens seems to be lower for India. Disclosure norms are not strictly followed by about 80% of listed entities even after the mandate. Over a collected sample of 40 firms, the Voting % of Public Non Institutional shareholders, is relatively very lesser than the Institutional holders and Promoters. The attendance % of all the shareholders (VIZ. Promoters, Public Institutional and Public Non Institutional) is less than 5% in the collected sample of 40 firms. There exists an expected Information Asymmetry due to poor (attendance and voting) % for the corporate actions of the listed entities. The study concludes that shareholders are losing their value due to their severe exposure to Asymmetric Information.

Originality

There are various studies in identifying the factors contributing to Governance and Shareholder's value. But using the attendance and voting % of shareholders at AGMs, is not specifically used as factor to study its impact on shareholder's value in India.

Value

It is very difficult to collect the data of shareholder's attendance in the listed entities of India. Though there was an act passed in 2013 to publish the voting results of all the agendas, there was a mandate by SEBI in the year of 2015, to disclose the results in a specific format. But most the firms are yet to implement that. The study has a pictorial representation of attendance and voting % of 40+ listed entities as a sample. The sample concludes that there is direct relationship between shareholder's value and their attendance at AGMs.

Shareholders may consider their right to "voice and accountability" for minimizing the Information Asymmetry.

Keywords: Asymmetric Information, Adverse Selection, Moral Hazard, Corporate Governance, Shareholder

Introduction

There is a pivotal importance for Corporate Governance (CG) in both developing and developed nations. There is a significant difference between the laws and general practices of CG in developing nations like India. CG and organization's progress are linked internally (Sharma Neha et al. (2014), Sahay M et al. (2015)). There is an observed gap between the expected and actual shareholder's value. That gap in this context is estimated to be Asymmetric information (AI). This paper talks about how Asymmetric Information plays a vital role in diminishing the shareholder's value. (Mishkin S Frederic et al. (2014)) AI is of two different types. The resultant of the AI before and after the occurrence of the transaction is termed as Adverse Selection (AS) and Moral Hazard (MH) respectively.

A shareholder (SH) considers secondary data to take an investment decision unless there is availability of primary data. It is the tendency of SH to expect profits from business invested in. But the firm should cooperate the SH with timely disclosures of the data to maintain a healthy relationship. (Aggarwal Reena et al. (2016)) Firms that get highly affected by the regulations and mandates are said to have poor governance standards. An effective CG is the possible tool that ensure transparency in the disclosures. (Gupta Atul et al. (2017)) The competitive markets tend to substitute the quality of CG, as the prime motto of any business is to make profits. The urge of a firm to gain any quick qualitative or quantitative benefits inspires it to manipulate the information. It often troubles the SH value in long term with the asymmetry in manipulated information. A firm always have the advantage of maintaining the primary information within, unless mandated by a regulatory to disclose.

Internal processes such as strategic accruals management can act as a tool to avoid the AI between insiders and outsiders. If there exists no discrepancy in the managerial decisions, it is viable for an entity to get healthy future cash flows. Management acts a special force in adjusting the expenditures to meet their short term profit targets (Julio (2016)). This process may extend to many sectors of business, as (C Lakshman et al. (2013)) talks about the CG issues in Indian premier league which engages lakhs of audience. (Villanueva-Villara Mónica et al. (2016) and Ararat` Melsa et al. (2016)) proves the impact of CG on the value of the firm in Spain and Turkey using Tobin's Q methodology. Economic conditions seem to be turbulent and prevalent in all the global markets. Whenever the firm exposes to stress there is a tendency to increase the size of board members that gave positive results. Results show that the person acting as chairman and CEO puts the firm out stress in risky situations. Good disclosure norms and higher CG index tends to boost the profitability of the firm. (Dai Lilli (2016)) Insider trading is strictly monitored and restricted in better-governed firms. But CG can only restrict the Insider sales, not the Insider purchases. Therefore, there is a possibility of MH from the Insiders, throughout the existence of firm. Garcia-Torea Nicolas et al. (2016) Effectives boards always try to address the interests of both shareholders and firm's stakeholders. Any board that addresses the issues of all the stakeholders is said to be effective. (Shawtari Ali Fekri et al. (2016)) In most of the firms CG turns up to be a window dressing, but not reality. This gap is occurred due to the several causes. One of such causes is AI.

The study looks into the facts of how is AI playing a key role in Corporate Governance of a firm and whether it is a boon or bane to the shareholder value? Lateral thinking on the information may hint that, symmetry in information may not often pays – off. Well the symmetry in the information may not always pay-off, but the losses are assessed to be for short term (if any). This paper emphasizes on how Asymmetric Information is going to be a bane to the shareholder's value in long term.

Objectives of the study

- To analyze the effect of AI on CG
- To analyze the effect of company's governance on the shareholder's value

Corporate Governance

“Corporate Governance refers to the set of systems, principles and processes by which a company is governed. They provide the guidelines as to how the company can be directed or controlled such that it can fulfil its goals and objectives in a manner that adds to the value of the company and is also beneficial for all stakeholders in the long term. Stakeholders in this case would include everyone ranging from the board of directors, management, shareholders to customers, employees and society. The management of the company hence assumes the role of a trustee for all the others.”

(Mary Lisa, (2009), Investment Dar Bank)

“Corporate governance is about how suppliers of capital get managers to return profits, make sure managers do not misuse the capital by investing in bad projects, and how shareholders and creditors monitor managers.” (American Management Association)

“Corporate governance is the relationship between corporate managers, directors and providers of equity, people and institutions who save and invest their capital to earn a return. It ensures that the board of directors is accountable for the pursuit of corporate objectives and the corporation itself conforms to the rules and regulations.” (International Chamber of Commerce)

“Corporate governance involves a commitment of a company to run its businesses in a legal, ethical and transparent manner – a dedication that must come from the very top and permeate throughout the organization.” (Report of the CII Task Force on Corporate Governance, 2009)

“Corporate governance is the system by which companies are directed and controlled.” (The Cadbury Committee on Financial Aspects of Corporate Governance, 1992)

CG includes management of SH's Equity, information disclosure, ethics and other components. (Pande Santosh et al.) A profitable future scope is always associated with a company that contributes to good CG. The presence of an active group of independent directors on the board makes a great deal towards ensuring confidence in the market. CG is known to be one of the criteria that foreign institutional investors are increasingly depending on, while making investment decisions. Having a healthy CG is also known to have a positive influence on the share price of the company. Having a clean image on the CG could easily enable companies to source their capital at more reasonable costs. Unfortunately, CG often becomes the point of discussion only after the exposure of a large scam. CG is similar to the governance of a state. Lack of CG leads a firm to losses, corruption and a tarnished image. The purpose of CG is to eliminate the junk in the operations of an organization. (Kim Woochan et al. (2017)) A study in Korea says that, Investor tends to have a heterogenic dimension of activism. The stock prices tend to increase when foreign institutional investors declare themselves to be activists and actively invest in stock markets. Their attention towards the stocks increases the stock prices. But one of the factors that pulls their grabs their attention is CG. (Bae Kee-Hong et al. (2012)) The firms with poor CG observed to be more sensitive to the market conditions. The change in market conditions quickly affects the firm. The expropriation incentives to the SH affects the firm's value during crisis, as it is observed in the post-crisis period of 2007 in the Asian markets.

(Hoechle Daniel et al. (2012)) Allocation of funds in the lines of business is hectic in few organizations. There are chances of few sectors getting underfunded and few getting overfunded. These misallocations make SH to face issues while investing in conglomerates.

(Dudley Evan et al. (2016) and Al-Najjar Basil et al. (2017)) It threatens the SH and makes him to pressure the firm with lower societal trust to disgorge the cash. The cash holdings of a firm have a direct relationship with trust. Being a qualitative factor, it is very difficult to quantify the trust accurately. But however we can rate them over scales by taking surveys and analysis. The factors like trust take their subjective beliefs about the gambles that they face. These beliefs take into account societal culture, professionalization and regulation. However, the trust of SH increases with the returns on investment. There is an optimal level for attaining returns. Exponential returns make a SH happy, but it is an alarming stage for a firm to reciprocate. According to *efficient market hypothesis*, all the opportunities will be exploited by the arbitragers and no business can get exponential returns for a longer term, unless the strategies are updated. It is fair enough to tap the new opportunities and enhance the SH wealth. But (Liu Xiaoding (2016)) Corruption culture in the organization influences the corporate misconduct. The cultural background of the management and directors adds value to these activities and results in the firm's corporate culture. Compensation of Executive and non-executive bodies, merger and acquisitions commands the efficiency of the firm. (Li Feng et al. (2011)) A non-founder CEO is paid on performance, compared to founder CEO. Compensation continue to carry its significance in deciding the productivity of the firm. The senior management compensation shares a direct relationship with SH value. The grievance on compensation in the senior management or executives redirects them to faulty measures and collapses the governance of the firm. (Min S. Byung et al. (2015)) To keep track of these activities it is one of firm's basic needs to have foreign ownership. Newly appointed outside directors significantly affected the foreign ownership. The improvement in the governance system helped improving the foreign ownership. (Andrieş Marius Alin et al. (2016)) A study on bank's systematic risk says that external governance significantly affects the impact of CG on systematic risk.

There are two major classifications of the firms, namely smaller and larger organizations. (Wilkin L. Carla et al. (2016)) No matter the size of the firm, but the impact of Information Technology on the CG of organization is high. CG information technology is targeted at improvising the IT needs of an organization. The proportion of benefits, influences and challenges are one and the same in both the types of organizations. (Thenmozhi M. et al. (2016)) Focusing on the Merger and Acquisitions, Country characteristics affect the cross border acquisitions. When a developed nation's firm tries to acquire the firm of developing nation, post-acquisition performance is impacted by the rules of the government in the target nation. The minimum difference in the gap of CG contributes to higher post-performance.

The motto of a business is to anticipate good profits, by safeguarding and enhancing the shareholder's wealth. (Utrero-González Natalia et al. (2016)) Does a SH react to the CG news? Yes, SH does react to the CG news. More than 60% of the investors are purely qualitative. Any qualitative investor will react to the CG news at the earliest and twist the stock price upon the intensity of news. CG announcements hold a direct impact on the stock price of the firm. Recollecting the Market crash scandal of China in 2015, it is an inference on how a news about the short selling in stock market creates panic in the investors and collapses the stock market. A SH is qualitatively conservative. SH investment on a firm is a conglomerate of his money, hopes, expectations and anticipations. Past studies prove that the SH value is point of focus in CG. (Clause 49, NSE)

One of the principles of CG is shareholder recognition. It is explained as a policy that ensures every SH to have a say in the internal communication of a company. Company's stock can be secured by SH recognition. The roles and responsibilities of board members should be clear to make sure that everyone shares a uniform vision of the company's future. Stakeholder's interest addresses the needs of participants who are not shareholders. Reaching out to non-

members fosters better communication and relationships with members of the press and the community. Ethical guidelines are equally crucial to secure profit and keep the company out of legal trouble. Transparency must be apparent, which should maintain the record keeping and reports of income. Including all the above procedures the roles of various components are mandated by SEBI VIZ. Board of Directors, Code of Conduct, Audit Committee, Subsidiary, management, Executive board members to maintain healthy CG practices for the progress of economy.

(Bereskin L. Frederick et al. (2015)) Improving the CG practices gained importance, as Credit ratings is another tool that impacts the stock price of the firm. (Kim Hugh et al. (2015), Manoj M et al. (2015)) Active investors are present in the nations with healthy CG practices and investor protection. (Larcker F. David et al. (2011)) Firm always has observed governance choices that are the resultant of high value contracts between and management and SH. (Iatridis Emmanuel George (2015)) Firms expecting an abrupt management change are likely to surge downwards. To withstand the sudden changes, it is likely to a firm to attempt an earnings manipulation.

(Jonge de Alice (2015)) explains the issues with gender equity in the management and board of directors and (Lupu Iulia (2015)) explains how blend of either genders makes an effective CG in the firm. Board composition, top management, valuation of firm and agent theory are other tools important in maintaining financial stability of the firm.

(Muttakin Badrul Mohammad et al. (2015)) A study on Bangladeshi companies reveals that the CG of the companies is largely ceremonial due to family dominance. He identifies a nonlinear affect between Intellectual capital disclosure (ICD) and family ownership. Foreign ownership, board independence and the presence of audit committees are positively related with the extent of ICD. (Cheung Mingyan William et al. (2015)) Examining the Real Estate Investment Trust (REIT) stock liquidity, it holds a positive effect on the firm value. It is possible to fetch higher institutional ownership and enable better results in governance with REIT. Without the presence of value-addition tools like corporate governance, the stock liquidity-value relation is not necessarily significant.

The principles of OECD emphasize the importance of CG in promoting transparency and fair practices, and allocating the resources efficiently. It focuses on consistency and quality of various attributes in CG practices and sharing responsibilities among authorities. For quality supervision and enforcement, a key emphasis is made. It describes the new roles of stock markets in supporting good CG. It identifies the basic rights of a shareholder, including shareholder participation and right to information in key company decisions. It mentions the control structure disclosure, such as different voting rights. Information technology serves as a tool to ensure transparency in the SH meetings.

Decisions regarding the executive remuneration mandates the involvement of shareholders. Sound economic incentives are needed across the investment chain, with a particular focus on institutional investors acting in a fiduciary capacity. It also highlights the need to disclose and minimize conflicts of interest that may compromise the integrity of proxy advisors, analysts, brokers, rating agencies and others to give insights in relevance to investors. It guides with respect to cross border listings and the importance of fair and effective price discovery in stock markets.

SH is always permitted to get the information on timely and regular basis. Building cooperation between stakeholders and corporations and showcase the importance of stakeholders by law or mutual agreements acts as foundation stone. Key areas of disclosure such as the operating and financial results, major share ownership, remuneration, company objectives, related party transactions, risk factors and board members enhances the value SH. OECD guides the board of directors, with corporate strategy review in selecting and

compensating management, overseeing major corporate acquisitions and divestitures and ensuring the integrity of the corporation's accounting and financial reporting systems. New issues of OECD include the role of the board of directors in risk management, tax planning and internal audit too.

(G20 /OECD 2015 and Clause 49, NSE)

Asymmetric information: *Adverse Selection and Moral Hazard.*

Lack in accurate information causes problem to corporations in two perspectives: *Before the transaction* and *after the transaction*. The problem created by AI before the transaction is termed as AS and after the transaction is termed as MH. (Frederic et al. (2014)) One party does not often know the complete information about the other party to make appropriate decisions in a market. This gap in information between two parties is termed AI. Borrowers tend to have a better information about the risks and returns involved in their project than lenders do. What if the lender is well aware of risks and yet credits the borrower by anticipating a misinterpreted gain?

When the potential borrowers are likely to produce an undesirable (adverse) output - the bad debts- are the ones who actively seek out a loan and most likely to be selected. Considering the credit market; it is a theoretical assumption that the loans with collateral face lesser default risk and the loans issued under no securitization face a higher default risk. But if we consider the 2007 credit cease, it shows a significant default from the mortgage loans also, as the banks failed to monitor the collateral physically, and issued loans with the *soft information* provided by the borrower. The attitude of a lender towards the borrower plays a vital role in motivating the borrower to cause a MH (Albertazzi Ugo et Al. (2015), and Berger N. Allen et Al. (2011)).

The effect of AI after the transaction is termed as MH. In a financial market it can be defined as the undesirable (immoral) activity by either of the parties involved in transaction. After borrowing money, if the loan is less likely to be paid back and highly probable to turn into a bad debt due to inebriated activity by the borrower, it is treated as an MH. On contrary if the lender tries to cheat the borrower by cheaper projections of instalments and heavy hidden charges, it could be treated as MH from lender's side. As MH by the lender tends to decrease the profitability and trust on the business, there should be periodic amendments in the governance of organization to monitor and curb the same.

(Beltran O. Daniel (2016)) The value of Asset backed securities during the 2007 crisis is below the intrinsic value because of the AI by the borrowers and failure of the banks to monitor the same as discussed above. All the tranches have suffered the pain caused by AI. There is a higher scope for MH because of Conduit lenders in the primary market. The same mortgage loan, when issued on secondary market, creates AI. (An Xudong et al. (2011)). A similar line of work involves developed models of how asymmetric information at the time of the IPO affects the size, timing, pricing, and existence of the IPO. The owner of firm is aware of value and risks pertaining to the assets of the firm proposed for listing. (Chen - wen - chen et al. (2013), and Lucain (2002). Let us look into the case of Cafe coffee day (CCD). CCD announced that they are going to invest 450 cr. to add 400 stores in next three years in India (*Economic Times (ET)*, - Sep 27, 2015). The news goes viral and there was a hype in the valuation of the stock. Nobody can assure that CCD keeps up the promise of business expansion. But the investor's perception and trust on the statement motivates the investor to loft his wealth quickly. The hype created by an owner can also be consider as AI, when the owner ought not to do so. On 2nd Nov 2015, CCD was initially valued to be issued at Rs.328 as an IPO on BSE, but after listing we see an immediate fall in the stock price by 4.6% to Rs.313 (*ET - Nov 02, 2015*). Timing in the information disclosure is very important to boost

the stock firm value. In the absence of AI, there is positive relationship between CG and company performance.

(Nilssen Tore (2000), and Gottlieb Daniel (2007)), speak about the MH in insurance markets by emphasizing on how a consumer gets locked up to an insurance due to lack of disclosure in Terms and Conditions and heavy switching costs. When the public perceives that the MH is very common in the insurance industry, Tore and Daniel also emphasize on how the cooperative insurance societies could overcome MHs in 1930s. (Rowell David et al. (2016)), reveals that a test conducted on AI in the automobile insurance industry. The policy that involves parents and children in a common policy of ex-ante (prior to the event occurrence), results in either:

i) Parent's performance is positively correlated with the children's performance in driving a car safer, if given 50% bonus in the premium using Bonus- Malus (*The term bonus-malus (good-bad in Latin) is used for describing benefit (bonus) or penalty (malus)*) method.

ii) Parent's performance is not correlated with the children's performance in driving a car safer and there is no moral hazard, will not have any impact of giving 50% bonus using Bonus- Malus method.

iii) Parent's performance is not correlated with the children's performance in driving a car safer and there is some MH.

In the hypothesis mentioned above they identify MH by insured to avoid paying a higher premium in the subsequent years. It signals man attempts to identify possibilities in minimizing the investment and maximizing the returns. So as the firms.

There is a severe impact by the vendors, when the services are outsourced and there is a heterogenic pricing. The network of vendors seems to weaken, when the pricing is heterogenic. The demand is often very stochastic and it quite obvious that a particular firm will have a better information about the supplier, compared to others. The process of supply chain always sees discrepancies with the variation in the supplier's behavior. (Mahadevan B. et al. (2016), and Lei Quansheng et al. (2015), Yu Ying et al. (2011)).

AI is part of the human curriculum. If we consider a patient approaching a doctor, a doctor will not have the complete information about the health of the patient. Similarly, a patient will not have complete information about the clinical diagnosis. The problems expressed by the patient provokes a doctor to suggest subsequent tests (Pedersen Bjørnskov Line et al. (2016)). In a recruitment process it is not advisable to delegate a senior manager for recruiting new staff, as recruiting the best candidate, might threaten their seniority. (Sengupta Sarbajit (2004)). (Ghosh Suman (2013)), explains the exploitation in micro financing due to AI and explains how few of the contractors have better information on the profitable contracts compared to others. (Sheng Jichuan et al. (2016), Schmitz W. Patrick et al. (2012), Xiang Pengcheng et al. (2015), Gaudet Gérard et al. (1997), and Matoso Rafael et al. (2014)). When a firm tries to acquire another firm to upstream or downstream operations, the limited information available might not actually serve the purpose. Thus, firms will often opt for agency to acquire information. It's a common phenomenon oligopolistic markets to buy trustworthy information. (Barros Fátima (1997)). As creditworthiness is trust worthiness, the lack in trustworthiness on the disclosed information will make the acquirer to approach the agency aid (Becchetti Leonardo (2011)). (Bester Helmut et al. (2012)) seller holds an unverifiable information, to not to put buyer under informational advantage. (Ferraro J. Paul (2008)), emphasizes the liberty of the land owners on the information about the land compliance and (Besfamille Martin (2004)), explains how local authorities enjoy the informational advantage. (Socorro Pilar M. (2007)) the intervention of the government improves AI and develop AS in the potential innovation. The free riding problems in the Joint Ventures will cause severe problems, if not correctly identified by the government. It is

important for the government to keep a generic and equilibrium tax subsidy that aims at over all progress of the economy. (Okajima Yoshitomo (2003)).

The inability of the firm in maintaining internal symmetry of the information leads an organization to misery in short/long run. Lack of trust by either of the parties (lender and borrower or buyer and seller), causes adverse effects on the CG of the business. Well, we peeped through lots of examples and developed an understanding effect of AI on shareholder's value by damaging CG.

Methodology

It is important to understand how shareholder value is impacted by the Information asymmetry. (Rim Houcine El et al. (2014)) talks about the *signal theory* that plays a vital role in maintaining healthy shareholders. It's the goal of management to gain shareholder's trust. To gain the trust they keep sending signals to the shareholder's in terms of announcements and Press releases. But it is observed that the shareholders are not taking the purpose of their right to information every penny they invest.

(Vojtech M. Cindy (2013)), AI also leads to impact the dividends of the organisation. Managers and shareholders are shared with AI. That is the reason managers often look forward to keep the perceived value very high. The process involves manipulation in spreading the expenses oddly to improvise/deplete the profit figures to adjust the dividends. Poor share holder has the power to attend the AGM and examine the information that is required. But not many shareholders actually attend the AGM and try talking to the management and understand the qualitative factors like good and bad.

Elbadry Ahmed et al. talk about the bid and ask price spreads to determine the AI hidden in an organisation. Higher proportion of independent directors might help monitoring the activities of organisation. The quality of governance is therefore having a direct impact on the AI in the organisation. The process of understanding the intensity is to quantify the CG factors with indicators. (Secco Laura et al. (2014)), there are a set of 78 indicators to measure the forest governance. (Pires Moreno Sara et al. (2015)), assess how local governments could use these indicators in incorporating the law and procedures. The national survey and several case study analyses show us the effectiveness of the process. (Knoll Martin et al. (2012)), the US millennium challenge account focuses on how many dimensions are really being measured to get an understanding on Governance quality. They use explanatory and confirmatory factor analysis to eradicate the issues errors in interpretation. EFA is confined to rigid assumptions and CFA enables to compare and test the results with correlation errors, common factors, complexity of factor degree, correlated errors.

Graph 1: India's Corporate Governance Estimates (2003-2015)

CORPORATE GOVERNANCE INDICATORS - INDIA(2002-15)

■ Control of Corruption: Estimate ■ Government Effectiveness: Estimate
■ Political Stability and Absence of Violence/Terrorism: Estimate ■ Regulatory Quality: Estimate
■ Rule of Law: Estimate ■ Voice and Accountability: Estimate



Source: <http://data.worldbank.org/data-catalog/worldwide-governance-indicators>

(Liang Deron et al. (2016)), uses five prediction models (VIZ. SVM, KNN, CART, MLP, NB) with type I and type II error analysis, to prove the impact of cost ratios on governance indicators in predicting bankruptcy. An intensive research work on financial ratios and CG indicators speaks that ratios are effective in making us understand the CG indicators in broader terms, we need other methodologies to support the argument. (Ward Hugh et al. (2015)), estimates the spatial correlations of governance indicators for African countries w.r.t. the GDP, Competitiveness, Rural Population, Fractionalization, Latitude, Decentralization and network etc... GDP and competitiveness shared a significant correlation with the governance indicators. The work with individual correlations of these factors would add value to the research work discussed above. Graph 1 shows us the plot of CG indicators from 2002 to 2015 in India. The trend in the bars shows the effectiveness estimate of the chosen indicators.

Chosen Indicators for the study:

- *Control of Corruption*: It measures the extent of perceptions on the power utilized for individual's private gain, including all types of corruption that includes the snapshot of private and elite interests of the state. This estimate gives the country's aggregate score on the indicator, with standard normal distribution units, ranging approximately from -2.5 to +2.5.
- *Government Effectiveness*: It captures the perceptions on quality of public services, civil service quality and the range of its independence from political pressures. It also takes the snapshot of policy formulation and its implementation, and the government's credibility in expressing commitment to such policies. This estimate gives the

country's aggregate score on the indicator, with standard normal distribution units, ranging approximately from -2.5 to +2.5.

- *Political Stability and Absence of Violence/Terrorism*: It captures perceptions on likeliness of the political instability or/and politically-motivated violence, with terrorism. This estimate provides the country's aggregated score on the indicator, with standard normal distribution units, ranging approximately from -2.5 to +2.5.
- *Regulatory Quality*: It captures perceptions on the extent of confidence to which agents would abide to society rules, and in particular contract enforcement quality, property rights, the police, and the courts, as well as the likeliness of violence and crime. This estimate gives the country's aggregate score on the indicator, with standard normal distribution units, ranging approximately from -2.5 to +2.5.
- *Rule of Law*: It measures perceptions on the government's effectiveness in formulating and implementing regulations and sound policies that helps in promoting private sector development. This estimate gives the country's aggregate score on the indicator, with standard normal distribution units, ranging approximately from -2.5 to +2.5.
- *Voice and Accountability*: It measures perceptions on the extent of participation of citizens of the country in choosing their government. Also measures the freedom of speech and expression, association and free media. This estimate gives the country's aggregate score on the indicator, with standard normal distribution units, ranging approximately from -2.5 to +2.5.

The behaviour of all the chosen indicators is projected in the graph 1. There is an improvement trend observed in all the variables when compared to base year except Regulatory quality and Rule of law. These two factors needs to be updated timely, as the type of crimes keep changing and individuals find new ways to commit fraud. But if we look at the last three years of indicators, there is improvement in all the indicators. As India is developing and there was a massive change in the ruling government from 2014, there is a higher propensity of the improvement in these indicators.

As discussed above, it is beneficial to understand the correlation of these indicators, which was not mentioned in the above literature.

Correlation Matrix: Corporate Governance Indicators of India

	<i>Control of Corruption: Estimate</i>	<i>Government Effectiveness: Estimate</i>	<i>Political Stability and Absence of Violence/Terrorism: Estimate</i>	<i>Regulatory Quality: Estimate</i>	<i>Rule of Law: Estimate</i>	<i>Voice and Accountability: Estimate</i>
Control of Corruption: Estimate	1					
Government Effectiveness: Estimate	0.3594762	1				
Political Stability and Absence of Violence	0.4596376	0.097846	1			
Regulatory Quality: Estimate	0.5711154	0.564022	0.103982969	1		
Rule of Law: Estimate	0.8006579	0.294755	0.075042093	0.78289983	1	
Voice and Accountability: Estimate	0.0387777	0.473213	-0.07266817	0.34701158	0.170727	1

Source: <http://data.worldbank.org/data-catalog/worldwide-governance-indicators>

NOTE: Voice and accountability assumed to comprise of the investors and other stakeholders of listed entities.

The correlation matrix shown above displays how these indicators are correlated.

As the data is quantified by gathering qualitative data with predefined measures by World Bank, the correlation value is divided into three different ranges.

Correlation coefficient	
Greater than 0.7	High correlation
0.5 to 0.7	Moderate correlation
Less than 0.5	Low correlation

Source: <https://www.andrews.edu/~calkins/math/edrm611/edrm05.htm>

Considering the above correlation, it is displayed in correlation matrix that Regulatory quality and Rule of law, Rule of law and control of corruption are highly correlated. Even though there is a moderate correlation shown by four other pairs, Rule of law seems to playing role in ensuring effective governance of the state.

(Akyol C. Ali et al. (2017)), SH empowerment with their voice and accountability estimated to be very important for the health of equity markets. SEC makes a reform of eliminating the uninstructed voting of broker of behalf of SH. But the reform doesn't seem to be showing significant improvement in average equity values.

(Ritzberger Klaus (2005)), Voting right of a SH serves a great deal in taking any corporate action. Shareholders are broadly classified into:

- Promoters (Market makers)
- Public institutional shareholders (Huge volume holders as an institution)
- Public Non Institutional shareholders (Individual shareholders)

(Uche O. Chinyere et al. (2016)), a study on institutional shareholders portrays how shareholders act as activists in Nigeria. It is important for any investor to monitor the health of every penny he invests. *Carl Icahn*, a well know activist takes up apple shares and drives the decisions of the company like issuing dividends, appointing directors and other resolutions. (Van Wesep D. Edward (2014)), There is no significant change in the governance of the firm by increasing the SH voting % for all the agendas over a selected list of companies in U.S. But voting % has a predominant role to in few of the key agendas. (Kind Axel et al. (2013)), an empirical analysis on European companies proves a great impact of SH voting % on the equity value of the company. It is more significant in the corporate actions taken during AGMs and EGMs. (Luc Renneboog et al. (2011)), Targeted firms perform poorer when the governance standards are poor. Apart from the voting %, the standard of governance eventually impacts the voting outcomes. SH proposals are useful tools to of external control in maintaining the equity value's health. Especially in Indian companies we see a family taking up the top hierarchy and acquire a lion share in the equity stake. The managerial decisions in Indian companies lies the senior hierarchy to the maximum. Other SHs has a minor impact on the decisions taken.

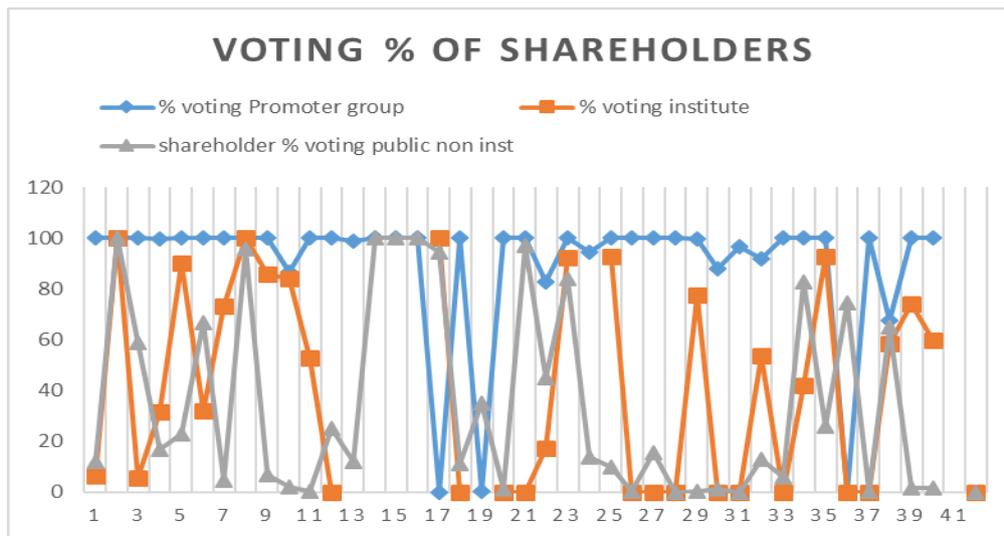
(Zuo Luo (2016)), but there lies an observed sensitivity of contemporary stock returns to the revised forecasts of the managerial earnings. Furthermore, investor's private information makes the managers to improve their forecast accuracy. But on the other hand investors also should be completely aware of happenings of the company. If either of the parties lack in complete information about the others, it opens the window for AI. The impact of AI on CG

is already discussed above. Eventually CG shows a significant impact on the SH value. But AI is a resultant of whose mistake? Listed Entity? Investor?

In India it is observed that Rule of law has got key importance improvising the governance of the firm. According to clause 35 (A), 35 (B) of SEBI regarding the ballot and e-voting rights of SH, clause 44(3) of SEBI mandates a standard format of disclosure of SH voting % in listed entity, AGM attendance and detailed results of each agenda carried forward.

Graph 2. Shows the voting % of three types of voters chosen on random years and different agendas from 2014 -17 over 42 listed firms of India that are following SEBI regulations and mandates.

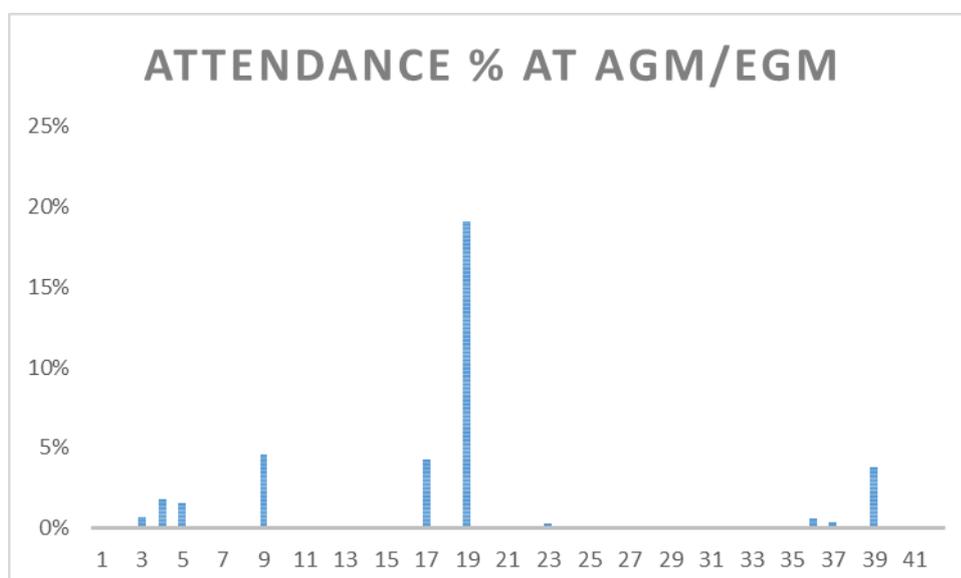
Graph 2: Random voting % of types of shareholders for different agendas (2014 to 2017)



Source: BSE Corporate actions

In the graph shown above, for most of the companies the promoter’s voting percent is almost 100. But the voting % of Institutional holders and non-institutional holders is significantly lesser and almost zero for most of the agendas. It is an understanding that the SH is not interested to take pain of participate in voting for several agendas in the company he invests. When he won’t utilize the right to vote for taking decisions, he cannot claim the Board of Directors for not paying dividends, poor performance of the stock and any interim changes in the value of the stock.

Graph 3: Shareholder’s attendance percentage of randomly chosen 42 firms for different agendas.



Source: BSE Corporate actions

Graph 3, Shows the Shareholder's attendance percentage AGM/EGM of randomly chosen 42 BSE listed

Firms with different agendas from the year 2014 to 2017. Peeping into the figures of attendance percentage, we develop an understanding that, none of the firms reported more than 20% of shareholder's attendance at AGMs and most of them are 0%.

Limitations

Collection of data is one of observed problems for the study. According to section 44(3) of SEBI (Stock Exchange Board of India) disclosure norms were revised in the year 2012 and all the listed entities got mandated to disclose the voting results of every agenda they carry out at investor meetings. Only few prominent listed entities started adapting the guidelines of SEBI for the convenience of shareholders, but many companies have delayed the implementation. Even though the disclosure standards are circulated, few of the companies are yet to implement them. Hence, it is a hectic task to collect the voting and attendance % of the listed Indian firms.

The governance indicators are projected from 2002 but the voting and attendance percentage is gathered from the FY2013-14 only. Hence the results may have to be fine-tuned before taking any analytical decision.

The sample consists of 42 firms listed under BSE mid-cap and small-cap. The results might vary according to extension to the sample by choosing Large-cap firms.

Future Scope

SEBI mandates to publish the voting results in a specified disclosure format (2nd SEP 2015, SEBI notification). According to the notification, the listed entity should be providing e-voting facility to the shareholder. Every listed firm should submit the voting results with their respective agendas within 48 hours to SEBI.

If data are published a specified format, there is a scope for analysing customised trends to study the impact of AI on SH value in other dimensions.

Enhancement of the sample to 1000 firms (upon data availability) adds value to the study as provides a better understanding on this relationship.

Conclusion

There is significant impact of AI on SH value of a firm using CG as a mediator. AI plays a vital role in diminishing the governance effectiveness of a firm. OECD and local governments continue to modify the guidelines upon predictions of the new SH risks. But companies eventually try exploring new opportunities in maximizing their returns. The world turns up to be very specific with CG principles, as risks are not usually being recognized until there occurs a disaster. AI is involved every day operations of a firm. As most of the companies are held by families, management and senior directors play a

dominant role in the Indian companies to corporate actions. SH is entitled to visit AGMs and find out the progress of the firm, by talking to the management and directors. But most of them barely do it. Instead, the SH tries to rely on the secondary data and opinions posted on the web, to take investment decisions. A SH is expected to be aware of his rights and take the purpose his rights to get profitable returns from the investment. SH couldn't always blame the senior management for poorer performance or lower yields on the equity stock. Instead if SH takes interest and projects a pinch of activism he could be able to drive the decisions of the firm and redirect the business to a successful path of his presumption. The study could be leveraged for better understanding, if the collected sample is extended to 1000+ firms.

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