

Managerial Myopia, Capital Market Reaction and Compensation Policy (A CSR and Marketing Perspectives)

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Taking advantage of the information asymmetry and agency conflicts between managers and shareholders in emerging markets. This study attempts to investigate the capital market response to managerial myopia and also examined the role of compensation policy in motivating the CEOs towards myopic behavior in the banking sector of Pakistan. The study considered a sample of Pakistani banks for the period 2009-2018 for the purpose of analysis. The study has employed panel regression models for the purpose of analysis and hypotheses testing. The results of estimated regression models showed that that decrease in corporate social responsibility and cuts on advertising and publicity expenditures have negative effect on the current stock market returns. Moreover, the results also showed that if the market fails to respond to the managerial myopia in the current period due to information asymmetry then a negative adjustment is made in the future stock prices of the banks. We further find that decrease in CSR, advertising, and publicity expenditures have a positive and significant effect on monetary compensation of CEOs. These results support the view that banks compensation policy motivate managers to behave myopically and capital markets do punish managerial myopic behaviour by undervaluing bank current and future prices in emerging markets. The current study has implications for the compensation committee of banks to revisit the existing compensation practices that motivate CEOs towards shortsightedness. The study findings also warrants myopic managers that their behavior will be punished by the capital markets. These findings also give insight to the shareholders and investors of banks to take in to account myopic behaviour while investing their funds in capital markets. More importantly, portfolio managers with long-term investments plan may also consider the managerial myopia as the current higher reported earnings by a bank could be the result of their myopic behaviour which can suffer

negative returns shock in futures. This study has used CSR and advertising & publicity expenditures as a measure of managerial myopia in financial sector that is rarely examined in case of emerging markets. Studies conducted on managerial myopia mainly focused on developed countries that are entirely different in regulatory framework, capital market efficiency, governance mechanisms and compensation practices in emerging markets provide ground for this investigation. CSR is an emerging phenomena rarely being studied in respect of managerial myopia in emerging markets.

Key words: *Managerial Myopia, Short-termism, CSR, Advertising and Publicity, Compensation, Capital market reaction.*

Introduction

Managers have a fiduciary duty to align firm activities strategically and to avail opportunities that could maximize shareholders' wealth. Managers should safeguard such strategies that maximize the total sum of expected discounted future earnings. Discount rate is a critical factor that reflects the management strategies to balance current and future benefits. However, there exists an information asymmetry between managers and outside shareholders in respect of a firm's actual value (Myers & Majluf, 1984), consequently, shareholders misprice the firm securities and expect higher returns on their investments (Thakor, 1990). As a result, these high expectations can upward bias the discount rate, which in turn puts pressure on a firm's management to concentrate on short-term strategies that could lead to short-term profits (Aras et al., 2010; Bebchuk & Stole, 1993; Bing, 2019; and Moren et al., 2014). This short-term performance pressure compels managers to forgo strategies that can generate superior profits in the long-run. This short-term oriented managerial behavior is known as myopic management (Aras et al., 2010; Mizik, 2010; and Jason, Dave & Margaret, 2014). Bhojraj and Libby (2005) define myopia as any managerial strategy that increases the short-term profits of a firm at the cost of future long-term benefits.

Managerial myopia is seen as one of the most fundamental problems faced by modern businesses in both advanced and emerging economies (Edmans, 2009; and Sung, Kim & Dongyoung, 2003). The academic debate on managerial myopic behavior began with the discussion on the myopic behavior of corporate managers of US firms toward capital market pressure (Bing, 2019; Jacobs, 1991; and Porter 1992). The perception originated from the belief that firms' shareholders depress share prices and adopt short-term performance orientation if they found a decrease in the current earnings since they cannot observe the mechanism through which current earnings are generated. On the other hand capital investments such as marketing, publicity, advertising, and corporate social responsibility etc spending are treated as expenses under the Generally Accepted Accounting Principles (GAAP). Thus, managers may reduce

such spending and report high current earnings to boost up the current share price (Stein, 1989). Consequently, managers' trade-off long-term profits for short-term earnings to meet market expectations and absorb capital market pressure. This short-termism phenomenon is highlighted by Graham, Harvey, and Rajgopal (2005) who surveyed around 78% of top management to conclude that managers do sacrifice long-term profitable projects for the sake of achieving short-run performance targets. However, this short-termist behavior of managers could not go away unchecked (Jason, Dave & Margaret, 2014). Hence, if corporate managers are thought to behave myopically that is if they reduce their spending in CSR, advertising, and publicity, then capital markets are expected to respond negatively by reducing stock prices of the companies.

Among all those factors connected to managerial myopia, the capital market pressure has received considerable attention from academicians and practitioners. More specifically, Bhojraj and Libby, (2005) reported that a firm's management increase reported earnings by reducing R&D expenditure in times when management anticipates issuing new stocks (Cohen & Zarowin, 2010; Sung, Kim & Dongnyoung, 2003). Similarly, managerial myopic behavior is reported by cutting R&D expenditure to avail their financial objectives (Askar et al., 2011; Bange and De Bondt 1998; Bens et al.2002; Cooper and Selto 1991; Dechow & Sloan 1991; Kevin, 2004 and Roychowdhury 2006). Whereas, He and Tian (2013) documented that firms with more analysts' coverage would be under more pressure to reduce R&D to meet short-terms earnings objectives at the expense of the firms' long-term profitability prospects due to reduced numbers and quality of patents. Another series of studies suggest that firms do invest in CSR activities in response to the market expectations and is valued in terms of high price (Ingram, 1978). Moreover, Shepard et al., (1997) argued that firms recognized CSR activities as their social responsibility and tend to give back to society rather than viewing it a capital market pressure. A positive effect of corporate social responsibility on firm performance is reported by various studies (Dietmar, 2014; Margolis & Walsh, 2003; and Orlitzky et al., 2003). Similarly, Bagh et al., (2017) investigated CSR and firm performance in the financial sector and found a positive and significant effect of CSR on various measures of financial performance such as ROA, ROE, and EPS. Thus, firms' CSR practices are perceived part of strategic goals and reflect good management practices.

However, we expect that the factors that motivate managers to reduce capital expenditures and R&D as discretionary activities would also be responsible for reduction in CSR and marketing expenditures (Brammer, Brooks, & Pavelin, 2006; Brammer & Pavelin, 2006; Dietmar, 2014; Harris & Raviv, 1996). Thus, myopic managers may underinvest in these activities to inflate earnings and meet market pressure. Moreover, Graham, Harvey, and Rajgopal (2005) argued that marketing expenditure is more at the discretion of the manager and can be manipulated due to the influential market pressure (Deleersnyder, Dekimpe, Steenkamp, & Leeflang, 2009; Lamey, Deleersnyder, Dekimpe, & Steenkamp, 2007; and Moren, 2014). However, a decrease in marketing and CSR activities is closely associated with the loss of financial performance



(Flammer, 2012), increase in the cost of equity (Ghoul, Guedhami, Kwok, & Mishra, 2011; and Moren, 2014), and decrease in firms value (Jiao, 2010).

The current study contributes to the literature of managerial myopic behavior in several ways. This is the first study in the banking sector of emerging Pakistani market to investigate the managerial myopic behavior; prior studies have investigated this phenomenon in the developed markets such as the US and the UK. For example, Stein (1988, 1989) supported the myopic nature of capital markets that encourage managers to behave myopically, whereas, Jensen (1988) argued that capital markets are efficient and discipline managerial myopia. We assume that managerial myopic behavior resulting from capital market pressure might be one of the responsible reasons of the greater volatility and instability of the emerging markets (Moren, 2014). Moreover, very little is known in the case of emerging economies, where the ownership patterns, institutional structure, and governance framework are entirely different. The earlier studies are conducted in an environment of relatively more efficient markets and with dispersed ownership. However, in emerging markets ownership is concentrated and majority firms are family dominated but the market is relatively less efficient. So, this unique type of institutional structure provides a novel case to examine managerial myopic behavior and its relationship with the capital market pressure. Secondly, in emerging markets, shareholders, market participants and institutions consider CSR as a barometer of firm long-term performance and environmental friendliness. In Pakistan, managers can inflate current earnings by reducing or not incurring the non-compulsory and discretionary CSR spending. This study also addresses the unresolved issue as why CEOs of companies seem shortsighted in emerging markets. In this regard we analyze the association of compensation policy of Pakistani banks with the myopic behavior. Whereas performance based compensation is prevailing in banking sector of Pakistan.

The rest of the paper includes a literature section; followed by the methodology section that discusses data collection and econometric models used in the study. The data analysis section is devoted to results and discussions. The last section is the conclusion and future directions for further research.

Literature Review and Hypotheses

The extant literature supports managerial myopic behavior of reducing corporate social responsibility (CSR), research and development (R&D) and marketing spending. Various studies empirically support the claims that CSR, R&D, and marketing-related spending expose management's ability of reporting increased earnings for the current period (Baber et al., 1991; Ferreira, Ding & Wongchoti, 2015; and Roychowdhury 2006). The myopic behavior is observed even in the final year of the administrative tenure of CEOs (Dechow & Sloan, 1991). In order to control the myopic behavior and retain long-term earnings focus, in the year 2004, the management of Google while opting for their initial public offerings decided not to provide frequent high earnings (Gitler et al., 2007). Similarly, a board was created in the US by the



chamber of commerce to give suggestions about not reporting quarterly earnings and searching ways to reduce the capital market pressure to ensure long-term earnings focus (Cheng et al., 2007). The extant literature documents grave concern of regulators and industry over the myopic behavior of capital markets; different initiatives such as capital gain tax and dividend tax are levied to control it (Hu et al., 2014; He & Tian 2013; Zhao et al., 2012). On the other hand, some authors are of the opinion that myopic behavior of the capital markets is not a conclusively established phenomenon (Houston et al., 2010). In fact, another stream of studies reported a positive influence of the capital market towards announcements of an increase in R&D expenditures (Jarrell & Lehn, 1985; Woolridge, 1988), even if those increase in R&D reduced the current period earnings (Chan et al., 1990).

Bhojraj, Hribar, Picconi, and McInnis (2009) analyzed data from 1988 to 2006 of group of firms who were forecasts beaters and firms who were forecasts misers. Within a trend of three years, the beaters were found reducing the R&D or advertisement expenditures to increase the current period profits while the misers did not reduce the R&D or advertisement expenditures. However, it was observed that beyond the three years the capital market adversely responded to the myopic behavior exhibited by the firms. Similarly, Tong and Zhang (2015) followed an event study methodology and found that myopic cutters in R&D performed in a five-day window surrounding earnings announcements. In line with these studies, we expect that if capital market is effective and does value myopia management, then investors will discount value of firm at a higher rate.

Ferreira, Ding and Wongchoti (2015) suggested that firms reduce current CSR, R&D and marketing spending to increase reported earnings at the cost of long-term benefits due to capital market pressure. The literature on CSR shows that it is inherently mispriced by the market participants due to information asymmetry (Kempf & Osthoff, 2007; Renneboog, Horst, & Zhang, 2008; and Statman & Glushkov, 2009). However, timely and accurate disclosure may reduce such information asymmetries (Dhaliwal, Radhakrishnan, Tsang, & Yang, 2012; and Ramchander, Schwebach, & Staking, 2012). Nevertheless, market participants face heterogeneity in cost and information processing which is compounded as a heterogeneous utility function for shareholders (Bollen, 2007). As a result of information asymmetry in CSR investments (Cho, Lee, & Pfeiffer, 2013), and market heterogeneous capacity to price, CSR could lead to violating the assumptions that such activities could be timely, linearly and uniformly priced by the market participants. Therefore, opportunistic and short-termist managers will take advantage of the opportunity and will reduce investment in CSR related activities in order to show short-term higher earnings at the cost of long-term gains. Even, if complete and freely accessible information about CSR activities is received by the market, still the reaction towards such information will be heterogeneous and would depend on interpretations of the market participants. Rational investors are expected to correctly determine the quality of reported earnings of firms and to price it lower if firms have considerably reduced CSR spending. Thus, if the CSR practices are a proxy for good

management and interconnected with the management discretionary activities then we presume that it could be a good indicator of myopic behavior of the management. So, we expect that if the CSR is a representative of good management and a bank's long-term performance, then information regarding the under investments in CSR and reporting relatively higher earnings from the previous year could be a reflection of managerial myopic behavior and the increase in the earnings will be priced lower by the market participants relative to other banks' reported profits.

H1: *“Same-year stock returns for banks with myopic CSR will be lower than returns for other firms with increased profitability”*

What will be the action of investors who could not recognize a reduction in the CSR investments and fail to adjust the price in the current period but if they later realize that such reductions could negatively affect the long-term performance of the firm? Will they adjust the same information in subsequent years? Ferreira, Ding & Wongchoti, (2015) reported that future earnings of a firm are negatively associated with the firm's past myopic behavior of reporting higher earnings. In other words, reduction in discretionary spending reduces long-term profitability prospects (Bing, 2019). So, we expect that if market participants fail to punish the myopic behavior of banks' management in the current period then adjustments will be made in future stock prices of banks found involved in short-termism.

H2: *“Future stock returns will be lower for banks with myopic CSR at the time they reported increased earnings than the future stock returns for other firms”*

Other studies document that myopic management creates multifold challenges for the marketers (Chapman & Steenburgh, 2009; Graham, Harvey, & Rajgopal, 2005; and Moorman & Spencer, 2008). For instance, it is reported that marketing expenditure is discretionary and can be easily manipulated in times when managers are doubtful in achieving their earnings targets (Deleersnyder et al. 2009; Lamey et al., 2007). Marketing activities (e.g. customer loyalty, product positioning, and brand equity) requiring immediate funding are source of intangible assets and affect firms' long-term financial performance. However, this phenomenon is quite exacerbated as very less is known about the effect of marketing spending on shareholders wealth or value of firms. Rust et al., (2004) argued that the nature of marketing activities is such that these cannot be easily quantified and connected to a firm's long-term benefits and hence these spending are undervalued. Moreover, these are treated as discretionary. Therefore, we expect that advertising and publicity spending will positively influence long-term performance of banks. In addition, an under investments in these activities coupled with reporting higher earnings could be associated with managerial myopia. So, a rational investor is expected to discount price of stocks of the banks found involved in reducing marketing spending and reporting higher earnings.

H3: “Same-year stock returns for banks with myopic advertising and publicity will be lower than returns for other firms with increased profitability”

Mizik and Jacobson (2007) argued that if investors do not respond in the current period to the decrease in advertisement and publicity expenditure coupled with high earnings reporting then rational investors do negatively adjust the stock prices of a myopic firm in the coming year. Research in myopic marketing management support the discretionary nature of marketing expenditure and support the prevalence of tradeoff between these expenditures and short-term performance (e.g., Bushee 1998; and Deleersnyder et al., 2009). Mizik (2010) viewed that due to the asymmetry of information and weak understanding of the myopic behavior of managers, investors take time to respond to the managerial myopic strategies and discount price of stocks of myopic firms in the long-run (Ullah & Shah, 2013). Based on the above discussion, we also hypothesize that any reduction in advertising and publicity expenditure by banks will be priced accordingly.

H4: “Future stock returns will be lower for banks with myopic advertising and publicity at the time they reported increased earnings than the future stock returns for other firms”

Extant literature suggests that association of managerial short-term performance and their monetary compensations is one of the major reasons of managerial myopic or short-termist behavior. For instance, Tong and Zhang (2014) argued that CEO-compensation is the main reason for decreasing CSR spending while inflating current year earnings (Ullah & Shah, 2015). Donaldson and Preston (1995) suggested that earnings manipulation is positively associated with executive compensation in firms with performance-based-compensation policy. Missing the earning targets is considered indicative of poor managerial performance and hence results in substantial decrease in the managerial compensation by the compensation committee. In line with this argument, Matsunaga and Park (2001) suggested that the CEO’s annual bonus is positively dependent on achieving quarterly earnings targets. Moreover, Porter and Kramer (2006) also argued that meeting of earnings targets by CEOs provide justification of the managerial compensation to shareholders and also helps the compensation committee avoid political restraints on CEO-compensation. So, managers may be able to increase their wealth through excess compensations while increasing short-term earnings at the expense of long-term performance. In this vein, Cai, Jo, and Pan (2011) also argued that overinvestments in CSR related activities lead to a decrease in CEO-compensation. Similar results are also found in the studies of Jian and Lee (2015); Mo, Park and Kim (2018); and Li and Thibodeau (2019). The positive association of CEO-compensation with the increase in reported earnings is negatively associated with the cost of CSR and advertising and publicity. In line with the above, we also posit that reducing CSR, advertising and publicity spending with an increase in reported earnings would be positively associated with the CEO-compensations.

H5: “There is exists significant effect of an increase in reported earnings and CEO-compensation”



Research Methodology

This section includes discussion on the data sources, research models and variables computation.

Data and Sources

The current study uses annual data of 28 banks listed in Pakistan stock exchange for the period from year 2009 to 2018. The data is extracted from the annual reports of the individual banks downloaded from their respective websites. Moreover, stock prices daily data of banks is collected from the Pakistan stock exchange website.

Variable Definition and Computations

The study examines the stock market reactions to managerial myopia and the role of banks compensation policy to motivate managers to behave myopically. The study is based on the three main variables discussed in the following text.

Managerial Myopia

In this study managerial myopia is computed by following Ferreira, Ding and Wongchoti (2015). We use two main variables; CSR index and advertising and publicity expenditure. These two variables are discretionary in nature in the Pakistani banking sector. Moreover, managers can easily manipulate these variables with the aim to report higher profits for the year due to performance based compensation prevailing in the Pakistani banking sector.

Turker (2009) recommended four different approaches to measure CSR which includes corporate reputation indices, single or multiple indicator method like donations and charity contributions, CSR index measurement through content analysis. We adopt the content analysis method to measure CSR. A content analysis is “A research technique for making replicable and valid inferences from data to their context” (Krippendorff, 2004, p. 18). This method has many advantages over others. It is more objective measurement technique (McGuire et al., 1988), can be employed on large sample to cover comprehensive set of factors across many firms and over a long period of time and thus could be better generalized (Aras et al., 2010; and McGuire et al., 1988). However, one common drawback of this method is the difference in firms’ actual and reported CSR practices. Following Jitaree (2015) measurement scale of CSR, we include 6 items relating to shareholders, 12 items related to information of employees, 5 items corporate governance, 8 items of customers, 6 items of suppliers, 3 items of competitors, 12 items of community and society, 13 items of environment and 6 items of CSR management. Each item of the sub-indices received value of “1” if the item is reported by a bank in a particular year otherwise it is assigned a value “0”. The value of sub-indices are computed by adding all items and divided it by the number of items. To get CSR index score

for a particular bank in a given year, we add values, in the given year, of all sub-indices and divide it by the number of sub-indices.

$$\text{CSR index} = (\text{Sum of Values of Sub-Indices}) / (\text{Total Number of Sub-Indices})$$

In the next step, we compute managerial myopia from the CSR index. A bank is considered myopic in a given year if its CSR index value decreases from its CSR index value in the preceding year and the bank's reported profits show an increase relative to that of the preceding year and the bank is coded as "1"; whereas, a bank not myopic is coded as "0". To determine robustness of the results, we also use amount donation contributed by bank in a year as an alternate measure of CSR. In this case bank is coded as myopic in a year, coded as "1", if the amount of donations decreases from the donated amount in the previous year and the bank reports higher profit relative to the previous year; whereas a bank not myopic is coded as "0". The study also computes managerial myopia from advertising and publicity expenditures and codes a bank as "1" if the bank reports decrease in advertising and publicity expenditures relative to the spending of the previous year and reports higher profits relative to the profits of the previous year, otherwise "0".

Stock Market Reactions

We use three main variables to measure capital market reaction; bank returns estimated through capital assets pricing model, Fama and French 3 factors model, and Tobin's Q. More specifically, the expected returns for a bank in a given year are computed by estimating capital asset pricing model on daily data for each year starting from 1st January. Annual earnings are announced in the month of December and reports become available till March of the next year on the official website of the banks. Therefore, we expect that January to March returns could better represent response of the market towards decrease in CRS Index and cuts on advertising and publicity. The following model is estimated on daily data of each bank and annual average returns are computed:

$$R_{i,t} - R_{ft} = \beta(R_{mt} - R_{ft})$$

Where R_i is bank i returns, R_f is risk free rate of 3 month T-bills, R_m represent KSE-100 index returns where t represents time period which is daily prices in our case. This study also use Fama and French 3 factors model to measure expected returns (shown below) as a more robust measure of market reaction towards managerial myopia. We use daily data of stock prices from 1st January to December for portfolio formation.

$$R_{i,t} - R_{ft} = \alpha_{i,t} + \beta_1(R_{Mt} - R_{ft}) + \beta_2(\text{SMB}_t) + \beta_3(\text{HML}_t) + \epsilon_{i,t}$$

Where $R_{it} - R_{ft}$ is difference of the bank returns and risk free rate, $R_M - R_F$ represents the market excess returns over the risk free rate, SMB stands for small minus big for size premium and HML is high minus low for value premium.

The third measure used to account for market reaction is the Tobin's Q. which is computed from the equation stated as below:

Tobin's Q = (Market Value of Equity + Book Value of Equity) / (Book Value of Assets + Book Value of Liabilities)

Control Variables

The study also include bank specific variables to account for bank specific characteristics. These variables include size of bank as log of total assets, firm growth as changes in the fixed assets over a period, leverage as debts to equity, net profit margin as net profit divided by sale and age as age of the firm since establishment. To account for year and bank type we use year and bank dummies.

Research Models

We estimate three baseline models borrowed from Ferreira, Ding and Wongchoti, (2015). In Model 1, dependent variable is expected returns measured through CAPM, Fama and French 3 factors model and Tobinsq q. whereas, the explanatory variables include CSR index and advertising and publicity (AGSP), leverage, firm size, growth, age, and net profit margin (NPM). In Model 2, the dependent variable future expected returns is replaced with the current expected returns and other variables remain the same as in Model 1. In Model 3, monetary compensation (salary and bonus & commission) is used as dependent variable with no change in the explanatory variables. All models include banks and years dummies.

$$ER(i,t) = \alpha + \beta_1 \times CSR \text{ index}(i,t) + \beta_2 \times AGSP(i,t) + \beta_3 \times Leverage(i,t) + \beta_4 \times Size(i,t) + \beta_5 \times Growth(i,t) +$$

$$\beta_6 \times Age(i,t) + \beta_7 \times NPM(i,t) + \beta_8 \times Bank(i) + \beta_9 \times YEAR(t) + \mu \text{ -----Eq-1}$$

$$ER(i,t+1) = \alpha + \beta_1 \times CSR \text{ index}(i,t) + \beta_2 \times AGSP(i,t) + \beta_3 \times Leverage(i,t) + \beta_4 \times Size(i,t) + \beta_5 \times Growth(i,t) +$$

$$\beta_6 \times Age(i,t) + \beta_7 \times NPM(i,t) + \beta_8 \times Bank(i) + \beta_9 \times YEAR(t) + \mu \text{ -----Eq-2}$$

$$COM(it+1) = \alpha + \beta_1 \times CSR \text{ index}(i,t) + \beta_2 \times AGSP(i,t) + \beta_3 \times Leverage(i,t) + \beta_4 \times Size(i,t) + \beta_5 \times Growth(i,t) +$$

$$\beta_6 \times Age(i,t) + \beta_7 \times Tobins \text{ Q}(i,t) + \beta_8 \times NPM(i,t) + \beta_9 \times Bank(i) + \beta_{10} \times YEAR(t) + \mu \text{ -----Eq-3}$$

Empirical Results and Discussions

Descriptive Statistics

Table A1 represents descriptive statistics of sub-indices of CSR and CSR index. The mean value of all sub-indices are more than 0.50 and mean value of CSR index is 0.823. Table A2 represents descriptive statistics of expected returns, monetary compensation, and control variables. The statistics show that expected returns measured through Fama and French 3 factors model, CAPM and Tobin's q are 8.5%, 12.6% and 9.16% respectively. The mean value of log of salary (COMP) and log of bonus and commission (BONCOM) are 7.75 and 7.45 respectively. Mean values of log of donations (DON) and advertising and publicity (AGSP) are 7.39 and 8.22 respectively. Similarly, mean value of firm size, leverage, growth, net profit margin and age are 8.54, 0.911, 0.174, 9.36 and 3.48 respectively.

Table A3 reports results of mean comparison test of myopic and non-myopic banks. The average expected returns measured through Fama and French 3 factors model, CAPM and Tobin's Q value are significantly higher for non-myopic than myopic forms. The average compensation in terms of salary and bonus and commissions are significantly higher in the case of banks observing short-termist behavior. The net profit margin ratio of myopic banks is more than non-myopic banks and the respective t-statistics reveal that the difference is statistically significant. In general, these statistics suggest that myopic behavior induce banks to report higher profits relative to non-myopic banks. Further, consistent with view of performance based compensation policy that short-termist managers inflate earnings by reducing discretionary spending it is found that the compensation of CEOs of myopic banks is also higher than the CEOs of non-myopic banks as these banks. However, rationale investors in the capital market do discount prices of stocks of myopic banks as we find that the expected returns computed through the three methods are lower for myopic banks than non-myopic banks.

Table 1 show results of the six regression models of the sample banks divided into two groups as myopic and non-myopic on the basis of CSR index. The dependent variable is stock market returns measured through the Fama French 3 factors model (FER), Capital Assets Pricing Model (CER) and Tobin's q and is indicated in the respective column headings. Whereas, CSR index is used as explanatory variable to account for the managerial myopic behaviour. The results of Model 1 and 5 show that decrease in CSR index has significant and negative effect on the stock market returns measured through Fama and French model and Tobin's q, whereas, there is negative but insignificant effect on returns measured through CAPM as reported in the case of Model 3. These results indicate that decrease in CSR is negatively responded by the rational investors. The results in Column 6 show that increase in CSR index has positive and significant effect on Tobin's q only, whereas in the columns headed Model 2 and 4, returns computed through the Fama and French model and CAPM show positive but statistically insignificant effect. These results indicate that increase in CSR index is positively valued by

the investors of the banks. These results are in line with the studies conducted by Cho, Lee and Pfeiffer (2013) and Ferreira, Ding and Wongchoti (2015) who documented that managers reduce current CSR and marketing spending to increase current earnings at the cost of long-term benefits. Moreover, regardless of the fact a bank belongs to which of the two groups, we find that firm size, firm growth and net profit margin have a positive and significant effect on the banks' returns measured through the Fama and French, CAPM and Tobin's q. Whereas, there is negative and significant effect of leverage and age on the banks' returns.

Similar to Table 1, Table 2 presents results of the two groups of banks however classified myopic and non-myopic now on the basis of advertising and publicity expenditures. The results of myopic banks in Columns 1, 3 and 5 show that decrease in advertising and publicity has significant and negative effect on the banks' returns measured through the three different methods. These results supported the view that managerial myopic behavior measured through decrease in advertising and publicity expenditures coupled with reporting increase in earnings is negatively responded by the rational investors. These results support the findings of Ferreira, Ding & Wongchoti, (2015) they also reported the discretionary nature of marketing expenditures and its positive association with managerial myopic behavior. Similarly, in the columns headed as Model 2, 4 and 6 results of non-myopic banks show that advertising and publicity expenditures has a positive effect on the stock returns; however the results in the case of returns measured through Tobin's q are not statistically significant. These results indicate that increase in advertising and publicity expenditures are positively responded by market participants and shareholders. In general, the results of the other firm specific variables are similar to the results in Table 1. Thus we conclude that managerial myopic behavior is punished by the rational market participants.

The following text discuss findings about the testing hypotheses H2 and H4 that if the rational investors respond negatively and adjust the stock prices of a myopic firm in the next year when due to information asymmetry they couldn't recognize a decrease in the CRS and advertising and publicity expenditures and fail to adjust the current year price. Table 3 reports the estimated results where the dependent variables are the one year future returns and are measured through the Fama and French model, CAPM and Tobin's q. Explanatory variables remain the same. The results of Model 1, 2 and 3 show that decreases in the CSR index has negative and significant effect on the banks future returns measured through the three different methods. Similarly, the results of the decreases in the advertising and publicity expenditures reported in the column headed as Model 4, 5 and 6 also exhibit negative and significant effect on the three different measures of returns. These results support the hypotheses that the rational market participants negatively adjust the future stock returns of those banks that report decrease in CSR, and advertising and publicity spending but report positive profits in the same year. Thus, these results support the notion that if market participants could not respond instantly to managerial myopic behavior due to information disadvantage then they would punish this behaviour by negatively responding to the banks' future share prices (Ullah, Shah & Shah,

2019). These results are in line with the study conducted by Mizik (2010) who reported that in emerging markets asymmetry of information and weak understanding of the myopic behavior of manager, market participants and investors take time to negatively respond to myopic firms' stock prices in the long-run.

Why managers behave myopically and become short-termists? We expect that performance based compensation policy is one of the reason. In the banking sector managerial compensation and rewards are subject to achievement of the annual targets. Therefore, this study considered two measures of CEO compensation that is total salary, and sum of bonus and commissions to examine its relationship with decreases in CSR related activities, advertising & publicity expenditures but simultaneously reporting higher earnings. Model 1 to 4 of Table 4 show that cuts on CSR related activities and advertising and publicity expenditures have positive and significant effect on salary (COMP) and the sum of bonus and commission (BCCOMP) granted to CEO. Thus, decrease in CSR related activities and cuts on advertising and publicity expenditures but simultaneously reporting increase in earnings have positive and significant effect on the compensation of CEO of the sample Pakistani banks. These findings are supportive of the view that to achieve their short term targets CEOs exhibit myopic behavior and reduce a given year discretionary spending to inflate and report higher financial performance of their firms. In return, this increase their monetary compensation through bonus and commissions attached with the achievement of short term targets. Thus, these results support our hypotheses that performance based compensation policy of banks motivates CEOs to focus more on short term earnings. These results are similar to the findings of Tang and Zhang (2014) who also reported that managerial myopia is positively influenced by the performance based compensation of CEOs (Jian & Lee, 2015; Mo, Park, & Kim, 2018; and Li & Thibodeau, 2019). In fact, these findings are also consistent with the prediction of agency theory that the risk averse managers advance self-interests at the expense of shareholders' wealth maximization.

The results of other control variables show that firm size, Tobin's q and net profit margin have a positive and leverage and growth have a negative effect on COMP and BCCOMP. However, age has negative but insignificant effect on both measures of compensation.

Robustness Check

We use an alternate measure of CSR; the amount of money spent as donation to charity each year. Donation is not regulatory or compulsory and are thus at the discretion of managers. Thus, if managers' decrease amount of donation in a given year but reported higher profits for the same year would implies that the managers trade off short term profits for long term benefits and behave myopically. Similar to the baseline results, the results of Model 1, 3 and 5 of Table 5 show that decreases in the CSR (measured as decrease in donations when profits for the period are shown higher) has negative and significant effect on all the measures of stock market returns. Similarly, Table 6 reports results of the relationship of future earnings with cuts on

donations. The results of Model 1, 3 and 5 support the baseline regression results and showed negative and significant effect of the cuts in donations on the three measures of future stock returns.

We further use donations as a measure of CSR in the CEOs compensation models. The results of the models estimated are reported in Table 7. The results of Model 1 and 2 shows that donation has negative and significant effect on salary (COM) and bonus and commission (BONCOM) respectively. These results indicate that cuts in donation with aim to increase reported earnings in the same year have a positive effect on the monetary compensation of the CEOs. Thus, compensation policy of banks motivate managers to behave myopically to achieve their earnings target and maximize their monetary compensation.

Conclusion and Future directions

Information asymmetry and agency conflicts between managers and shareholders are considered peculiar characteristics of emerging markets. The current study took advantage of these characteristics and attempted to investigate the response of capital market towards managerial myopic behavior. Furthermore, the study also investigated the association of managerial compensation and managerial myopic behavior in the banking sector of Pakistan. The study measured managerial myopia through decrease in CSR and cuts on advertising and publicity expenditures but reported higher profits for the same year. The study considered a sample of 28 banks for the period from 2009 to 2018 and used a multiple regression analysis to test the proposed hypotheses. The results showed that decrease in CSR and cuts on advertising and publicity expenditures have considerable negative effect on the current stock market returns computed through Fama and French 3 factors model, CAPM and Tobin's q. Moreover, the results also showed that if the market could not recognize managerial myopia in current time due to information asymmetry then they do negatively adjust the future stock prices of banks. The results of the compensation models showed that decreases in CSR and cuts on advertising and publicity expenditures have positive and significant effect on monetary compensation of CEOs measured in terms of salary and sum of bonus and commission. These results supported the notation that banks compensation policy is one of the major factor that induce managers to behave myopically. Rational investors of the capital markets in emerging economies mitigate this agency cost by punishing managerial myopic behaviour through undervaluing the banks' current and future prices.

The results of the current study can be further improved by taking in to account other measures of managerial myopia such as cuts on capital expenditures and research and development activities. Similarly, other measures of managerial compensations can be take in to account. Moreover, the same study can be replicated in non-financial sectors as well and cross country data can be utilized to validate the results. Future researchers can also take in to account the data of developed and developing countries and managerial myopia can be examined and the results can be compared for similarities and differences.



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APPENDIX

Table A1: Descriptive Statistics of CSR index and Sub-Indices

Variable	Obs	Mean	Std.De	Min	Max
Shareholders	252	.942	.103	.667	1
Employees	252	.875	.061	.75	1
Corporate governance	252	.946	.094	.6	1
Customers	252	.698	.082	.375	.75
Suppliers	252	.835	.165	.333	1
Competitors	252	.885	.163	.333	1
Community & Society	252	.783	.139	.364	1
Environment	252	.523	.112	.308	.769
CSR Management	252	.918	.123	.667	1
CSR INDEX	252	.823	.072	.636	.929

Note: Managerial myopia is measured through CSR index following content analysis method and advertising and publicity (AGSP). Where, CSR index is the sum of values of sub-indices divided (*Shareholders, Employees, Corporate governance, Customers, Suppliers, Competitors, Community & Society, Environment, and CSR Management*) by total number of sub-indices.

Table A2: Descriptive Statistics Expected Returns and Control Variables

Variable	Obs	Mean	Std.Dev.	Min	Max
FER	252	.085	.011	-.01	.03
CER	252	.126	.576	-1.519	.382
Tobinsq	252	9.16	.057	2	36.23
DON	252	7.394	.745	5.185	8.978
AGSP	252	8.228	.499	6.854	9.482
COMP	252	7.754	.33	6.161	8.5
BONCOM	252	7.458	.934	5.742	9.336
Control Variables					
FIRMSIZE	252	8.541	.422	7.48	9.43
Leverage	252	.911	.04	.74	.98
Growth	252	.174	.408	-.794	3.718
NPM	252	9.368	.851	6.975	10.631
Age	252	3.48	.687	2.398	5.043

Note: Expected returns *FER, CER, and Tobinsq* are computed using daily stock prices data through Fama and French 3 factors model $\{R_{i,t}-R_{f,t}=\alpha_{i,t}+\beta_1(R_{M,t}-R_{f,t})+\beta_2(SMB_t)+\beta_3(HML_t)+\epsilon_{i,t}\}$, capital assets pricing model $\{R_{i,t}-R_{f,t}=\beta(R_{M,t}-R_{f,t})\}$, and Tobin's Q. Managerial myopia is measured through CSR index following content analysis method and advertising and publicity (AGSP). *COMP* stands for salary, *BONCOM* stands for bonus and commission, and *DON* represents donations. Symbols *FIRMSIZE* for size of bank as log of total assets, *leverage* is debts to equity, *Growth* is firm growth as changes in the fixed assets over a period, *NPM* is net profit margin as net profit divided by sale and age as age of the firm since establishment.

Table A3: Mean Comparison Test - Myopic and Non-Myopic Banks

Variable	Myopic Mean1	Non-Myopic Mean2	T-value	P-Value
FER	.051	.081	23.664	0.000
CER	.028	.056	22.087	0.000
Tobinsq	6.4	8.8	19.931	0.000
COMP	7.775	5.737	48.715	0.000
BONCOM	7.503	4.424	26.1156	0.000
NPM	9.488	7.276	18.761	0.000

Note: Refer to Table A2 for the definition of the variables.

Table 1: Regression Results – Myopic behavior Measured Through CSR index

	Model 1 (Myopic) FER	Model 2 (Non-Myopic) FER	Model3 (Myopic) CER	Model 4 (Non-Myopic) CER	Model 5 (Myopic) Tobinsq	Model6 (Non-Myopic) Tobinsq
CSR index	-0.097** (0.044)	0.003 (0.025)	-0.086 (1.044)	1.093 (1.076)	-0.048*** (0.014)	0.059** (0.028)
LEVE	-0.070*** (0.015)	-0.026** (0.012)	-0.703 (1.701)	-0.713 (1.257)	-0.630*** (0.220)	-0.563*** (0.174)
FIRMSIZE	0.007** (0.003)	0.009** (0.004)	0.007** (0.003)	0.305 (0.205)	0.055*** (0.019)	0.002 (0.022)
GROWTH	0.006** (0.003)	0.000 (0.002)	1.329*** (0.160)	0.544*** (0.082)	0.007*** (0.001)	0.002** (0.001)
AGE	-0.005 (0.004)	-0.001 (0.002)	-0.222** (0.101)	-0.070 (0.096)	-0.002 (0.011)	-0.024** (0.009)
NPM	0.009*** (0.003)	0.003*** (0.001)	0.178** (0.084)	0.019 (0.075)	0.012** (0.005)	0.016*** (0.005)
BANK	Yes	Yes	Yes	Yes	Yes	Yes
YEAR	Yes	Yes	Yes	Yes	Yes	Yes
_cons	0.806** (0.313)	1.949* (1.065)	3.948 (3.727)	-91.826** (38.134)	-0.414 (0.466)	0.057 (3.624)
Obs.	78	102	78	102	78	102
R-squared	0.302	0.382	0.302	0.300	0.384	0.364

Note: Refer to Table A2 for the definition of the variables. To account for year and bank type we use year and bank dummies. Standard errors are in parenthesis and *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 2: Regression Results – Myopic behavior Measured Through AGSP

	Model 1 (Myopic) FER	Model 2 (Non-Myopic2) FER	Model3 (Myopic) CER	Model 4 (Non-Myopic) CER	Model 5 (Myopic) Tobinsq	Model6 (No-Myopic) Tobinsq
AGSP	-0.005** (0.002)	0.006*** (0.002)	-0.008** (0.004)	0.004*** (0.001)	-0.005*** (0.002)	0.004 (0.012)
LEVE	-0.088*** (0.023)	-0.005 (0.035)	-0.631*** (0.221)	-0.032 (0.517)	-0.533* (0.288)	- 0.584*** (0.149)
FIRMSIZE	0.009** (0.004)	0.009** (0.004)	0.238 (0.278)	0.008 (0.180)	0.045*** (0.017)	0.024** (0.011)
GROWTH	0.002** (0.001)	0.003*** (0.001)	0.606*** (0.106)	1.358*** (0.150)	0.007** (0.003)	0.019** (0.009)
AGE	-0.002 (0.004)	-0.000 (0.002)	-0.229 (0.200)	-0.101 (0.083)	-0.017 (0.015)	-0.022** (0.008)
NPM	0.006*** (0.002)	0.003** (0.002)	0.054** (0.027)	0.104 (0.082)	0.015* (0.008)	0.013*** (0.004)
BANK	Yes	Yes	Yes	Yes	Yes	Yes
YEAR	Yes	Yes	Yes	Yes	Yes	Yes
_cons	0.585** (0.222)	4.807*** (1.000)	-0.143 (5.716)	-7.261** (3.173)	0.900 (0.587)	-4.176 (3.024)
Obs.	57	123	57	123	57	123
R-squared	0.197	0.251	0.337	0.392	0.381	0.336

Note: Refer to Table A2 for the definition of the variables. To account for year and bank type we use year and bank dummies. Standard errors are in parenthesis and *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 3: Regression Results of Future Returns and Managerial Myopic behaviour

	Model 1 (Myopic) FER	Model 2 (Myopic) CER	Model 3 (Myopic) Tobinsq	Model 4 (Myopic) FER	Model 5 (Myopic) CER	Model 6 (Myopic) Tobinsq
CSR index	-0.071*** (0.025)	-0.438*** (0.158)	-0.329** (0.129)			
AGSP				-0.008** (0.003)	-0.023** (0.011)	-0.009*** (0.003)
LEVE	0.026** (0.013)	0.925*** (0.332)	0.382*** (0.113)	0.036*** (0.011)	2.144** (1.060)	0.600** (0.290)
FIRMSIZE	0.004** (0.002)	0.754** (0.297)	0.076** (0.033)	0.017** (0.006)	0.401*** (0.113)	0.083** (0.039)
GROWTH	0.009*** (0.003)	0.243** (0.103)	0.041*** (0.013)	0.009*** (0.002)	0.177** (0.075)	0.028** (0.010)
AGE	0.000 (0.002)	0.124 (0.159)	0.034** (0.015)	0.008** (0.003)	0.118 (0.161)	0.021 (0.020)
NPM	0.003* (0.002)	0.070*** (0.027)	0.019*** (0.007)	0.005*** (0.002)	0.074*** (0.007)	0.021** (0.010)
BANKS	Yes	Yes	Yes	Yes	Yes	Yes
YEAR	Yes	Yes	Yes	Yes	Yes	Yes
_cons	0.448** (0.175)	11.528** (4.892)	2.479*** (0.719)	0.613*** (0.217)	2.697 (6.874)	3.739*** (1.077)
Obs.	78	78	78	57	57	57
R-squared	0.279	0.142	0.529	0.275	0.168	0.485

Note: Refer to Table A2 for the definition of the variables. To account for year and bank type we use year and bank dummies. Standard errors are in parenthesis; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 4: Regression Results of Managerial Compensation and Myopic Behaviour

	Model 1 COMP	Model 2 COMP	Model 3 BCCOMP	Model 4 BCCOMP
CSR index	0.368** (0.175)		2.570** (1.04)	
AGSP		0.631** (0.328)		0.905** (0.334)
FIRMSIZE	0.0109** (0.057)	0.313** (0.161)	0.778** (0.374)	0.999** (0.407)
GROWTH	-0.378** (0.152)	-0.612*** (0.131)	-0.620* (0.334)	-0.235 (0.196)
AGE	-0.001 (0.002)	-0.003 (0.002)	-0.007 (0.006)	-0.009 (0.006)
TOBINSQ	2.997** (1.01)	0.062*** (0.015)	1.022** (0.458)	0.679*** (0.195)
NPM	0.321** (0.147)	0.088** (0.042)	0.343** (0.184)	0.499** (0.244)
BANKS	Yes	Yes	Yes	Yes
YEAR	Yes	Yes	Yes	Yes
_CONS	3.119 (3.452)	3.215 (3.202)	2.077 (1.885)	0.946 (0.819)

Obs.	78	57	78	57
R-squared	0.324	0.336	0.362	0.314

Note: Refer to Table A2 for the definition of the variables. To account for year and bank type we use year and bank dummies. Standard errors are in parenthesis and *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 5: Regression Results – Donations as CSR & Expected Returns

	Model1	Model2	Model3	Model4	Model5	Model6
	(Myopic)	(Non-Myopic)	(Myopic)	(Non-Myopic)	(Myopic)	(Non-Myopic)
	FER	FER	CER	CER	Tobinsq	Tobinsq
CSR	-0.003** (0.001)	0.002** (0.001)	-0.056*** (0.014)	0.023 (0.099)	-0.007*** (0.002)	0.007** (0.003)
LEVE	-0.007** (0.003)	-0.060** (0.031)	-0.782*** (0.161)	-1.997** (1.000)	-0.840*** (0.191)	-0.351* (0.198)
FIRMSIZE	0.008** (0.004)	0.002 (0.005)	0.489** (0.220)	0.495** (0.226)	0.261*** (0.021)	0.211*** (0.019)
GROWTH	0.002** (0.001)	0.004** (0.002)	1.228*** (0.165)	0.561*** (0.088)	0.019** (0.010)	0.001 (0.007)
AGE	-0.001 (0.002)	-0.001 (0.003)	-0.121 (0.110)	-0.131 (0.093)	-0.004*** (0.001)	-0.030*** (0.011)
NPM	0.002** (0.001)	0.004** (0.002)	0.143** (0.012)	0.072** (0.037)	0.016*** (0.004)	0.009* (0.005)
BANKS	Yes	Yes	Yes	Yes	Yes	Yes
YEAR	Yes	Yes	Yes	Yes	Yes	Yes
_CONS	0.271*** (0.012)	0.471** (0.197)	-0.992 (1.192)	-0.735 (1.194)	-0.406 (1.073)	0.561 (0.399)
Obs.	91	89	91	89	91	89
R-squared	0.323	0.315	0.364	0.342	0.369	0.398

Note: CSR which is the amount of money spent as a donation to charity in each year; Refer to Table A2 for the definition of the other variables. To account for year and bank type we use year and bank dummies. Standard errors are in parenthesis *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 6: Regression Results – Donations as CSR & Future Expected Returns

	Model1	Model2	Model3	Model4	Model5	Model6
	(Myopic)	(Non-Myopic)	(Myopic)	(Non-Myopic)	(Myopic)	(Non-Myopic)
	FER	FER	CER	CER	Tobinsq	Tobinsq
CSR	-0.002** (0.001)	0.001*** (0.000)	-0.084*** (0.029)	0.097 (0.180)	-0.009** (0.004)	0.008** (0.004)
LEVE	0.018 (0.026)	0.012 (0.034)	0.164 (1.474)	2.348 (1.864)	-0.791*** (0.229)	-0.320* (0.171)
FIRMSIZE	0.004** (0.002)	0.019*** (0.005)	0.250 (0.286)	0.499* (0.253)	0.054* (0.030)	0.032 (0.025)
GROWTH	0.003* (0.002)	0.002 (0.003)	0.117** (0.044)	0.102 (0.076)	0.033*** (0.010)	0.017 (0.011)
AGE	0.001 (0.002)	0.003 (0.003)	0.073 (0.106)	0.124 (0.165)	0.001 (0.014)	0.030** (0.013)
NPM	0.002*** (0.001)	0.003* (0.002)	0.017 (0.083)	0.015 (0.085)	0.009** (0.004)	0.009** (0.004)
BANK	Yes	Yes	Yes	Yes	Yes	Yes
YEAR	Yes	Yes	Yes	Yes	Yes	Yes
_CONS	6.616*** (0.697)	0.880*** (0.321)	43.904 (35.620)	6.584* (3.948)	9.229* (4.998)	2.610*** (0.759)
Obs.	91	89	91	89	91	89
R-squared	0.563	0.316	0.100	0.136	0.460	0.422

Note: CSR which is the amount of money spent as a donation to charity in each year; Refer to Table A2 for the definition of the other variables.

To account for year and bank type we use year and bank dummies. Standard errors are in parenthesis *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 7: Regression Results – CEO Compensation and Donation as CSR

	Model 1	Model 2
	(Myopic) COM	(Myopic) BONCOM
CSR	-0.092** (0.040)	-0.228*** (0.028)
FIRMSIZE	0.691*** (0.296)	0.584*** (0.128)
GROWTH	0.199** (0.100)	0.465** (0.204)
AGE	-0.000 (0.001)	-0.005 (0.005)
TOBINSQ	0.561 (1.348)	4.976** (2.520)
NPM	0.064** (0.028)	0.202*** (0.074)
BANK	Yes	Yes
YEAR	Yes	Yes
_CONS	3.128 (6.034)	1.061 (1.466)
Obs.	91	91
R-squared	0.23	0.29

Note: CSR which is the amount of money spent as a donation to charity in each year; Refer to Table A2 for the definition of the other variables. To account for year and bank type we use year and bank dummies. Standard errors are in parenthesis *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

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