Influence of Intellectual Capital Information Disclosure on Dividend Policy:
Case of KSE Listed Non-Financial Firms of Pakistan

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Abstract

This research study influence the impact of ICD on dividend policy. ICD is estimated by using intellectual capital index and for dividend policy, DPO is used as proxy. ICD is significantly positively influence the DPO which clearly demonstrate that higher intellectual capital disclosure leads the higher DPO. These findings also depicts that reducing trend of information asymmetry became the cause of high level of disclosure (Christien & Farooq, 2015) the outcomes of this study are similar to prior studies which also conclude that higher ICD leads to higher DPO. It has also been claimed that high DPO is a result of proper information environment that bound the insiders from exploiting firm's resources. (Nilsen & Farooq, 2015).Findings of this work are also consistent with preceding literature which reflect that the lower level of agency issues leads to increase in DPO. (Porta & Vishny, 2000) (Li&Zhao, 2008). Firm size insignificantly impacts on the policy of dividend in all three models. These results are same as (Shehzad Khan, 2015) which also specify that there is no impact of firm size on dividend policy and this is contrary to (Nilsen & Farooq, 2015) results. Return on asset ratio use to evaluate the profitability of firm and assumes that, dividend policy significantly affected by the Return on asset (ROA).Results are consistent with prior studies which also determined that Return on asset has significant impact on DPO in the non-financial PSE listed firms. Moreover, these findings are same as (Ahmed, 2009) and (Paul Healy, 2001).Mostly, it is considered that the firm that have higher liquidity will pay the lower payment of dividends but the findings are with (Friend and Puckitt,1964), which

show that there is no any relationship exist among liquidity and DPO. Key findings associated to Earning ratio (EPS) and DPO are observed which described that the both increasing and decreasing trend of Earnings have insignificant impact on DPO. It is also determined that the firms that the distribution of dividend payments is mandatory regardless of firm's earning. The reason behind this may be strict and rigid rules, policies, and guideline of PSE and may be for the purpose of attaining good image in the market.

Key words: ICD, Dividend Policy, Human Capital, Relational Capital, Structural Capital, KSE

INTRODUCTION

In this modern era, rapid growth has been found in demand of ICD because of dissatisfied traditional financial reporting, as well as, its capability to provide sufficient information regarding ability of organization to create value in the market and the relevance of Intellectual Capital information disclosure for shareholders in the capital markets (Catasus & Grojer, 2003). Ballow (2004) argue that, ICD gain more importance now a day because traditional accounting assets of companies are considered inadequate leading components to determine the market value of firm. (Ballow J. J., 2004).A "knowledge-intensive" organization that is characterized by its technological advancement and rapid enforcement on intellectual capital (Stewart, 2001). Intellectual Capital plays a progressive and significant role in sustaining the organizational performance; positively linked with firm performance also the growth rate of firm's IC is significantly related to firm performance (Tan, 2007). Thus it is certainly useful in investment decisions. Barker (1999), argues that IC gain more importance especially in the procedure of valuing firms certainly in assessing the quality of management. . By disclosing Intellectual capital information, firms may be able to publicly provide the evidence regarding its values and beliefs and its wealth creation competences, which directly influence the enhancement of the company's reputation (Barker, 1999).

The profitability of any firm depends on its skill and ability to enhance the usability of expertise and knowledge as well as increase

the learnability factors among its professionals and experts. These expertise, experience, knowledge and skills of professionals such as ability to innovate, create differentiation from others because of up to date and modern technological usage, brand recognition, and ability to attract and retain clients or customer all are included in intangible assets of any company (Infosys Yearly Report, 2007-08). Sofian R. (2011), documented that, 30% value of firm would be presented by Intellectual capital (Sofian R. , 2011).

Furthermore, it is also suggest that, in reality, majority of this information is not disclosed by insiders (managers), therefore, "information gap" has been created that became the cause of information asymmetry between insiders and outsiders (Paul Healy, 2001). The significant positive influence of disclosure has been presented by (Botson, 1997), to reduce the cost of equity and by (Sengupta, 1998), to reduce in debt cost. Positive impact has been observed in the growth of share performance (Paul Healy, 2001), that is unrelated to present and future expected earnings (Gelb & Zarowin, 2000) also observed the positive impact of ICD that create the expectation of higher stock-price and could also be associate with future earnings, when made comparison with those companies that have lower disclosure levels (Gelb & Zarowin, 2000). Lunawat (2013),contribute with a notion of management credibility and trustworthiness and contends that organization's repute of being trustworthy, gain significant attention from stockholders and investors in forecasting future dividend yields (Lunawat, 2013). Barker (1999) claims that, due to the practical complications in the use of current available information for estimating future cash flow, fund managers, analyst and investors prefer "unsophisticated" valuation methods such as, applying 'dividend yield' instead of utilizing the currently available information for the purpose of forecasting future cash flow Further (Barker, 1999). Van Overfelt (2010) recommended that dividends could be considered as a significant substitute for investigating the firm's income statement transparency, the notion behind analyzing the correlation among information asymmetries, assumed as Intellectual Capital disclosure (ICD),and dividend policies is reflected to be a novel and a remarkable avenue to pursuit (Van Overfelt, 2010). Especially in developing countries such as Pakistan, because of their vulnerable political economic and business condition. The core determination of this

research work is to investigate the influence of disclosure of intellectual on dividend policy by using volunteer and qualitative information (narratives and visual images) provided by the annual reports. This piece of work is an attempt to fill the gap that obtained from preceding literature by documenting the relation among ICD and firms' selection of Dividend policy

As ICD is new concept, very few studies conducted on this concern and utilization of IC index for investigating various categories of IC and finding their impact on dividend policy. Previous studies were conducted in developed countries such as Denmark and Australia and business condition, circumstances and environment of advanced and under developed countries may varies so, the expected results could also be different. However, this study is conducted in Pakistan that explores the extent of disclosure and its impact on business in underdeveloped countries such as Pakistan. Limited studies have been conducted to find the association of ICD with dividend policy. However, in the case of developing countries such as Pakistan, to the best of author's knowledge, no such type of study has been found that specifically explore the impact of ICD on organization's dividend policy. To identify this gap, this piece of work is going to investigate the notion whether ICD influences the dividend policy of non-financial firms in Pakistan. It can be considered as the basic motivation of this paper.

LITERATURE

From the Last few decades, Intellectual capital gain significant importance in the whole world due to its potential need in the organization development process. Different academicians and researchers conduct studies and an extensive collection of definition given in the preliminary literature regarding intellectual capital. Such definitions vary because of differences that found in personal characteristics and organizational attributes (Mouritsen, 1998) regarding the knowledge that could be utilize for value creation (Stewart, 2001) Stewart (1997), also opinions that IC is simply the sum of all those things that to be present in any company for the purpose of gaining competitive advantage in market. Marr & Schiuma (2001) and CIMA (2001) certainly provide complete and comprehensive view of Intellectual Capital in their definitions such as

follow "The possession of knowledge and experience, professional Knowledge and skill, good relationships, and technological Capacities, which when applied will give organizations competitive Advantage"(CIMA 2001) and "The group of knowledge assets that are attributed to an organization and most significantly contribute to an improved competitive position of this organization by adding value to defined key stakeholders"(Marr & Schiuma, 2001). The prime purpose of the definitions of concept of intellectual is to inquire the association among IC and the organizational structure as well as its performance (Marr & Schiuma, 2001). They attempt to briefly express the uniqueness of IC that varies from individual to firm or organization for the purpose of achieving as well as enhancing the competitive advantage. Intellectual capital is considered as the "combination of intangible assets" that facilitate the organization to function efficiently.(Brooking, Mourtsen, & Larson, 2001). Roos (2005), explore the concept of IC and provide definition such as intellectual capital is basically the all intangible resources that are partly or fully under the control of firm and also take part in the process of organizational value creation (Roos, 2005)

However, from broad range of definition of IC, three major and broadly acceptable categories are comprised such as structural capital, human and relational capital (Petty and Guthrie, 2000; Zambon and Lev, 2003; Boedkar, 2005; Bahsin, 2008). Human Capital (HC) is considered as one of the fundamental and crucial resource of firm comprising judgment, training, intelligence, experience, relationship and awareness and insight of workers and managers in the organization.(Schiuma &Marr, 2001; Marr,2004; Sonnier et al, 2008). For the reason that they captures the professional skills including innovativeness, knowledge and experience of personnel within the organization.(Wright, McMahan, McCormick, & Sherman, 1998), beliefs that HC has so much importance as it is able to provide the means and resources for enhancing and enjoying the competitive position in market.SC comprises not only the structure but also the process that developed and organize by the employees in order to be effective, productive and also innovative(Boedker, 2005). Patents, copy wright, new product development, organizational culture, and management philosophy and information system all these things are included in structural capital. Relational capital (SC) is the third category that captures the information about the relationship among

suppliers and customers and knowledge regarding market channels as well. Hence, it is declare that relationships not only within the organization but also with their external stakeholders are included in relational capital.(Petty & Guthrie, 2000)

IC is considered as an essential source in the process of value creation of an organization in market, however outdated accounting standard are failed to provide the qualitative data that significantly related to IC of organization.(Jihene, 2013).Because of that, voluntary disclosure plays an essential role in minimizing information asymmetry among mangers, shareholders, and local and foreign investors.(Uyar & Kiliç, 2012) In the same way (Vergauwen & Alem, 2005) determine that, to have proper information about activities of organization that has significant impact on shareholder as it is the basic right of shareholder because they do not have any other legal resource to obtain information about the organizational performance. IC can be assumed as an information concept that provides pertinent, appreciated, and related information to outsiders for the purpose of long-term sustainability of organization, (Hayton, 2005) The researcher claims that distinctive resources related to Intellectual Capital permits an organization to enter in new markets, create quality products and achieve first -mover advantage.(Hayton, 2005) Intention behind ICD, is to reduce the information asymmetries among outsiders and insiders by disclosing the information regarding those concepts that were overlooked or typically ignored in the financial statements of organizations. Financial reports only provide detailed information of physical, however disclosure of information regarding intellectual capital is insufficient.(Oliveras, 2008).Previous literature claims that IC is as equally important as tangible capital in determining the future prospects of firms. Similarly, preceding literature discusses that, failure in disclosing information regarding Intellectual Capital may cause agency issues by letting management (insiders) to enjoy benefits at the expenses of shareholders (outsiders).(Thompson & Randall, 2000). As mention that, traditional financial reports fails to provide sufficient information regarding IC, knowledge-intensive organization became a simple target for expropriation by management (insiders). However, ICD could leads to considerable reduction in the risk of expropriation by minimizing the causes of information asymmetries(Arvidsson, 2011).

Holland (2006), argued that Intellectual Capital Disclosure may cause to reduce the amount of private information and in consequence, perceived uncertainty regarding intangible assets and their prospective benefits has become lower. Tan (2007) identify the contribution of IC in the firm's performance varies by industry, (Bukh, Nielson, Peter, & Jhon, 2005) further implied it and found that particularly higher Intellectual Capital discloser in "research-intensive" industries, like biotech businesses (Cerbioni & Perbonitti, 2007). Parbonetti and Cerbioni (2007) inspect the association among variables of governance and ICD of European biotechnology firms. Their outcomes suggest that variables related to Governance, such as CEO duality and structure of board significantly influence the disclosure of information Quantity. Are dividend policies of firms can be influenced by the information asymmetries that faced by the firms? Asymmetries in information is considered as a dominant market imperfection. However, the extent and the influence of asymmetries in information on dividend policies takes significant consideration in previous literature (Bhattacharya, 1979; Miller and Rock, 1985; John and Williams, 1985).Prior academic researches and literature documents that there is significant influence of information asymmetries on firm's dividend policy. Similarly, La Porta (2000), claim that, higher payout ratios depicts the better information condition that restrict insiders from exploiting (misusing) the resources of an organization. In addition, Zhao and Li (2008) ascertain that the extent of agency issues, such as errors in earnings forecast by analysts as well as dispersion in their estimates may have significant negative influence on dividends. Researcher scholars determine that firms with high agency problems are reluctant not only to pay but also increase the dividends. It is also demonstrate that such organization pay small dividends whenever they have to pay, as compare to those firms that face lower level of agency issues.

Underlying Theories:

Signaling Theory

According to M&M (1984) signaling theory developed on two common assumptions. First, insider have more information than shareholders .Second, managers have significant information advantage as they are in position to choose the information for disclosure to provide signal to

common public regarding the position of firm. Signaling theory recommends that "more profitable firms will disclose more information to inform their stakeholders about their good performance"., Accordingly, firms that are more profitable (having good performance) would like to disclose more IC information as compared to the firms having bad performance.

Stakeholder Theory:
According to stakeholder theory, it is assumed that a firm should take activities that are expected and accepted by the stakeholders and it is also expected that the report of these activities also provided to their stakeholders (Petty & Guthrie, 2000).Additionally, this theory suggests that the stakeholders of any firm have complete right to get information regarding activities of the firm and how these activities influence on them. However, they are not directly involve in the activities but the success and failure of the firm rely on their stakeholder (Deegan, 2000).

 Legitimacy theory:
Legitimacy Theory has been explained as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions"(Suchman,1995). organizational legitimacy established through representational activities and symbols that can be able to convey a" public image" (Dowling, 1975). This theory is closely interrelated to stakeholder theory and it hypothesized that there is surety regarding firm's operations and activities which perform by following the limits and are according to the standard established by society in which they live and work (Petty & Guthrie, 2000).Hence, this underlying theory encourages the firm to disclose IC information voluntarily for the welfare of society.

On the other hand, preceding literature claims that the failure to disclose evidence and information related to IC may increase the agency issues that allow managers (insiders) to exploit resources, at the stake of shareholder (outsiders) (Thompson and Randall, 2000). Bukh and Nielson (2015), argue that mangers are not allowed to exploit corporate resources because of better information condition in organization and states that higher ICD causes lowers the means and incentive for insiders to gain undue advantage from corporate

resources. Resultantly, more profit would be received to shareholder when insiders were not in condition to exploit resources for their private purposes. Consequently, it could be expected that, firms that have higher ICD to distribute high dividends as compare to the firm with lower Intellectual Capital Disclosure. (Nielson & Farooq, 2015)

On the bases of prior literature, it would be hypothesized the following relationship.

Hypothesis:

H1: All other things remain same, there is significant positive influence of ICD on Dividend policy.

H2: All other things remain same, there is significant positive influence of human capital on Dividend policy

H3: All other things remain same, there is significant positive influence of Structural capital on Dividend policy

H4: All other things remain same, there is significant positive influence of Relational capital on Dividend policy

Research Methodology:

In this study, secondary source of data has used to investigate both ICD and dividend policy. To examine the relationship among ICD and dividend policy, panel data approach is used because both cross sectional and time series data is collected to evaluating the influence of Intellectual Capital Disclosure on Dividend policy. Annual reports of the sample organization for the years (2011-2015) has used to collect data.

Recent 5 years data has been selected, as IC is new concept and due to inadequate knowledge, less awareness and understanding regarding the significance of IC, Intellectual capital related data was inappropriately disclose in previous firm's reports. ICD is measured with use of Index developed by (Sveiby, 1997) and adopted by (Petty & Guthrie, 2000) and other number of researchers such as (Bozzolan, Favotto and Ricceri 2003).Index is divided in three main categorize such as human capital which is also known as employee competence, relational and structural capital and all these three categories comprises on various number of items This index consist of total twenty four items. From these, 9 based on internal capital, nin9 on external capital, and 6 based human capital. The ICD of organization is computed from corporate reports, and thoroughly analyze the

content of corporate reports of every sample organization. After that, this information is coded according to the designed framework of Intellectual Capital Disclosure.

Assumption related to Intellectual capital information disclosure is as follows:

➢ Information collected from reports should be volunteer
➢ Data provided in notes is not considered
➢ Information is in form of paragraph would be consider.
➢ Information can be in form of   headings and sub headings
➢ Evidence provided by the financial statement should not be include. (Nielson & Farooq, 2015) and (Bukh, Nielson, Peter, & Jhon, 2005)

24-items index which is considered as the advanced and revised form of Intangible asset monitor, developed by Karl Erik Sveiby and the adapted form of (Bukh, Nielson, Peter, & Jhon, 2005) index and is divided in three categories such as Structural ,relational and Human Capital and also used by (Petty and Guthrie, 2000), (Bozzolan, Favotto and Ricceri 2003),and (Brenaan, 2001).This ICD related to employees, Process, customers, R&D, Information Technology as well as strategic statements to develop an index consist of 24-items. Dichotomous approach is used for compilation of data of ICD from the firm's annual reports. ICD index is constructed and values are assigned that ranges from 1 to 24 and 1 indicates the least ICD and 24 indicates the high disclosure of IC. If the required information is disclosed in annual reports, then scored "1"otherwise "0"for each item. After that, this categorical data is converted into percentages by dividing the sum of each category on total number of disclosures. Similarly, in the case of individual category, such as Human capital or Structural capital, the total number of '1' is divided by the total items of that dimension .For the purpose of applying index approach, developing a checklist of those items which are expected disclose and not disclose by the firm. (Marston & Shrives, 1991). Main focus in content analysis is that only consider the information which is volunteer. This index was successfully used in a various prior studies (Singh and Van Der Zahn, 2008; White, 2007).

The payment trend of a firm has become the reason to create perception regarding financial health and the value of a firm which provide guidance to their investor in making investment and DPO is

used as proxy to evaluate the dividend policy (La Porta, 2000)..Data for Dividend policy has collected from annual reports of the non-financial PSE listed firms. Sample selected on the basis of Firm's Dividend policy. Corporate reports provide important information that have accessiblity to their shareholders and the information provided by annual reports is highly correlated with the general information floated in markets. Only those firms are considered that pay dividends. By following this way, 61 non-financial firms were selected that pay dividend from PSE 100 index over the year 2011 to 2015.Moreover, IC is new concept so, there is no information found in previous annual reports regarding IC. In this paper, most current data is used for investigating the recent trend of ICD and dividend policy of organization.

Intellectual capital disclosure index

Organizational/Internal capital	Relational/Customer capital	Human capital
Patent	Brand	Employees
Copyright	Customer	Company know how
Trademark	Customer loyalty	Training
Infrastructure asset	Company name	Work related knowledge
Management philosophy	Distribution channels	Work related competences
Information system	Business collaboration	Entrepreneurial spirit
Networking system	Licensing/franchising agreement	
Corporate culture	Favorable contract	
Management process	Financial contract	

(Nilsen and Farooq 2015)

Econometric model

Fixed and random effect models were used to estimate the effects among the stated variables in the model. When in each cross sectional unit have same amount of time series observations then this system is called Balanced Panel. For the purpose of testing developed hypothesis regression model is applied where estimate the ICD as an independent variable and dividend policy as dependent variable. DPO used as proxy for analyzing the independent Variable .Firm size, liquidity, leverage, firm performance ,EPS and P/E considered as control variable in this research. ICD index is used for estimating the Intellectual capital information disclosure (ICD).Panel data which is

the composition of both cross sectional and time series is used. It can be explored through different technique such as

➢ Fixed Effect Model

Yit =β1Xit +αi +uit ……………Equation1

➢ Random Effect Model

Yit =βXit +α +uit +εit……… Equation 2

Durbin -Wo- Hausmann Specification Test

"The Durbin -Wo- Hausman test" which is also called Hausman specification test. It is used for the purpose of selection among random effect and fixed effect model. Haussmann Test is estimated the proficiency of above stated regression models and used as a tool for the selection of model which implied to estimate the appropriateness and suitability of given models. If the value of Hausmann test is (CHI2.Prop>0.05) then it is significant and in this situation, choose the fixed effect model. If the value is greater 0.05 then it is insignificant. In this situation select random effect model for analysis.

Descriptive Statics:

Variable	Observation	Mean	Std. Dev.	Min	Max
Firm size	305	7.678156	1.158534	4.155306	10.59766
ROA	305	14.88842	10.50231	-24.55145	46.23451
Liquidity	305	1.657397	0.9377961	0.0462183	6.909417
Leverage	305	48.8788	20.78875	0.5920194	90.81957
EPS	305	23.5828	44.78254	-24.33	354.55
DPO	305	40.00906	33.20954	0	132.61
P/E	305	11.71702	13.69761	-49.83	93.6
SC	305	42.92987	17.02228	0	77.77778
RC	305	38.2867	16.76034	0	88.88889
HC	305	33.16834	14.27363	0	66.66666
ICD	305	39.00273	13.2374	4.166667	70.83334

Results of Random Effect Model and Fixed Effect Model:

Random effect model and fixed effect model is used for investigating the impact of independent variable on dependent variables and the empirical results were reported in following tables. In table 1 result presented regarding relationship among Dividend policy, ICD,EPS ROA, Leverage, PE and Liquidity and in Table 2 presented the results of dividend policy, RC, HC and SC along with liquidity EPS,ROA, PE and Leverage**.**

variables	Random Effect	Fixed Effect
ICD	1.106045*	1.384909*
	-0.1705496	-0.1905952
Firm size	0.0308025	0.0404872
	-0.0469207	-0.0896059
ROA	.3368053*	.1811422***
	-0.0975333	-0.1155473
Liquidity	0.0893308	0.0658425
	-0.1091699	-0.1284999
Leverage	-0.0576575	-0.0535522
	-0.1888609	-0.2863132
EPS	.3488959*	.4450036*
	-0.0691579	-0.0848799
Price earnings	0.0314887	0.0463816
	-0.0771861	-0.0822264
Constant	-1.284175	-1.740541
	-0.5946282	-0.9518721
R2	0.278	0.2326
Hausman test		0
No of observation	305	305

"*shows the significance level of 1% and ** shows the significance level of 5% and *** shows the significance level of 10%. Upper value in column shows the coefficient and value in parenthesis shows the standard error".

Interpretation:

Results of fixed and random effect models are mentioned in table1, that basically depicts the capability of independent (explanatory variable) to determine the independent variable (dividend payout ratio).R2 (2 is used for square) under the Random Effects model is 27% and for fixed effect model, it is 21%. the estimated coefficient ICD (independent variable) is statistically significant with positive sign in both models, which justifying that ICD is significantly and positively influencing the dividend payout ratio of firms and in this current study is about 1.384% in FE and1.1% in RE and positive sign specify that, with the increase of intellectual capital disclosure, increase in dividend payout ratio has also been experienced accordingly. Liquidity and leverage are insignificant, firm size is negatively significant ROE, EPS and PE is positively significant in both models.

variables	Random Effect	Fixed Effect
Human capital	.2559942**	.37679*
	-0.1201966	-0.1511997
Relational capital	.3655754**	.7727783*
	-0.1694947	-0.213995
Structural capital	.2937076**	.2357188***

	-0.1214288	-0.1415893
Firm size	0.0298525	0.018929
	-0.0474527	-0.0903499
ROA	.3320577*	.2110704***
	-0.0986649	-0.1168467
Liquidity	0.1217975	0.1002437
	-0.1108499	-0.1301812
Leverage	-0.03081	-0.0503266
	-0.191452	-0.2898038
EPS	.3406658*	.4222694*
	-0.0699599	-0.0862867
Price earnings	0.0133966	0.0287404
	-0.0784917	-0.0834659
Constant	-0.9557353	-1.502955
	-0.5836222	-0.9537658
R2	**0.2833**	**0.2194**
Hausman test		**0**
No of observation	**305**	**305**

"*shows the significance level of 1% and ** shows the significance level of 5% and *** shows the significance level of 10%. Upper value in column shows the coefficient and value in parenthesis shows the standard error".

Interpretation:

Under RE model R2 (2 is denoted the square) is 28 % and 21% under FE model. The results presented in table II, that determined the human capital (HC) coefficient which is statistically significant with positive sign in both models, demonstrating that Human Capital is significantly and positively contribute towards dividend payout ratio of Non-financial PSE listed firms in Pakistan and in this study it is .25% in RE and .37% in FE model .Positive sign specify that with the increase of HC disclosure of firms, dividend payout is also show increasing trend accordingly. RC is significant with .36% in RE and in FE it is.77%.SC is also significant with .29% and .23% in both models respectively Leverage, Firm size, Price Earnings Ratio and Liquidity all are in insignificant but Earning Per Share is positively significant in both models.

Conclusion

This study investigates the impact of ICD on dividend policy. ICD is estimated by using intellectual capital index and for dividend policy, DPO is used as proxy.

ICD is significantly and positively influence the DPO which clearly demonstrate that higher intellectual capital disclosure leads

the higher DPO. These findings also depicts that reducing trend of information asymmetry became the cause of high level of disclosure (Christien & Farooq, 2015) the findings of this study are consistent with prior research which also conclude that higher ICD leads to higher DPO. La Porta (2000), claimed that higher dividend payout ratio is due to appropriate information environment which limit insiders and mangers from misusing and exploiting the resources of firm (Nilsen & Farooq, 2015). These findings are consistent with prior literature which reflects lower the agency problems leads to increase in dividend payout ratio. (Porta & Vishny, 2000) And (Li&Zhao, 2008).

Firm size insignificantly effect on dividend policy in all given models and these findings are similar to (Shehzad Khan, 2015) which indicate that the firm size has no any type of effect on dividend policy and this is contrary to (Nilsen & Farooq, 2015) findings. ROA is used to measure the profitability of firm and assumes that it significantly impacts on dividend policy. These findings are similar to previous studies which also indicate that ROA significantly and positively influence the dividend payout ratios. Findings of this work are highly consistent with (Grullon, Michaely, & Swaminathan, 1999) and (Ahmed, 2009).In general, it is considered that the firm having higher liquidity ratio will pay lower dividends but findings are inconsistent with (Friend, 1964), which demonstrate that the insignificant influence of liquidity on dividend policy. It is also observed that divided policy is not affected by the earnings ratio and decreasing and increasing trend of earning insignificantly effects on dividend policy. It indicates that, it is mandatory for firm to distribute dividend payment without focusing on their pattern of earning. This is because of strict rules and regulation of PSE and for the purpose of accomplishing the worthy image in market.

Limitation and recommendation:

It is anticipated that the IC would take an essential part in future earnings. Also expected that a positive association among dividend policies, ICD and firm performance that leads to excess return. Regulatory bodies should play a role in policy implication by articulating the guidelines regarding IC disclosure .The manager of the company disclose the IC information for the purpose of conveying

more information about company and also provide information related to management practice The volunteer intellectual capital information disclosure would motivate the investors to invest more and the transparency in information about firms' activities leads to a significance impact on investors.

Sample size of firms and time period can be increased. Intellectual capital index with large number of items can be developed for further researches.in this research only non-financial firms are included, future researcher can conduct research on financial firms. Comparison among financial and financial firms can done in future. Also comparative analysis can be conduct among firms of developed and developing countries which provide keen insight about differences in intellectual capital disclosure.

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