Indian Journal of Economics and Business Vol. 20 No. 4 (December, 2021) Copyright@ Ashwin Anokha Publications & Distributions http://www.ashwinanokha.com/IJEB.php

Effect of Culture on Capital Structure of Developed and Emerging Countries

Sumaira Andleeb¹, Arshad Hassan² and Saira Ahmed³

Department of Management Science, 1,2,3

Capital University of Science and Technology (Cust Islamabad, Pakistan)

Islamabad Expressway,

Kahuta Road, Zone-V Islamabad.

Corresponding author: sumaira malhi0303@yahoo.com

Received: 19th August 2021 Revised: 14th September 2021 Accepted: 15th October 2021

Abstract: This paper explores the effect of four dimensions of Hofstede, Power distance (PD), Individualism (IND), Uncertainty avoidance (UNC) and Masculinity (MAS) on choice of capital in developed and emerging countries. This study investigates that 1)culture of the country effects significantly on decision of capital or not?. 2) Do Cultural dimensions effect in same manner on decision of capital in developed and emerging countries or differently. For this paper secondary data of non-financial firms is collected through DataStream for the period of (2006 to 2016). Sample size consists of 3210 firms/year observation for 300 firms from 6 countries ,50 firms from each country with highest market capitalization inyear 2016. The results reveal that culture of the country have significant effect on capital decision and the it effects in same way in both groups..

Key words: leverage, company specific factors, board size, independent directors, female directors and Hofstede cultural dimensions.

Introduction

1.1 Background of the Study

In this globalized economy, international businesses had not only diversified portfolios rather their management also have divergence in terms of proficiencies and procedures. When firms are operating across the border, questions arise about the similarity in their operational, investing and financing decisions as these organisations are not only functioning in different countries rather also in unrelated cultures. So, in these globalized corporation cultural sensitivity is essential. For the success of these multinational corporations one of the key factors is knowing about the culture of their people as these

individuals are involved in decision making process and their national culture can affect their decisional power. In current years multi-cultural practices have become significantly visible in corporate business. Cultures and organizational values become co-terminous when corporations are operating across the national border. So, culture has crucial role in a dynamic environment at corporate level. A visible difference can be observed in a cross-cultural management decision which are adhered by national culture. Lindholm, (2000) stated that national culture plays essential role in determining the organizational culture. As stated above that culture effect the decision-making process where administrators are influenced by their national culture and ultimately various organizational functions such as operational, investing and the most important one financing decisions are affected by the policy makers values as culture is based on the values and beliefs of the individual. Earlier studies also documented those various corporate decisions are supported by culture. This relation is also emphasized by Li et al. (2013) who found that informal institution culture of the country influences formal institutions of the nation in managerial decision-making process which ultimately influence the risk-taking aptitude of the corporate executives. Risk of the organization can be increased by its financing choice, either the firm raise finance through debt or equity, called as capital of the firm. In the corporate world "capital is the lifeblood of growing business" (Gaud, Jani, Hoesli, & Bender, 2005). As growing organizations face a lot of problems, the most important one is the decision and difficulty of financing, means "the act of providing funds for business activities". According to pecking order theory, a firm can use three sources of finance, i.e., internal finance, debt, and equity (Baskin, 1989). Internal finance is the use of retained earnings of the firm which are mostly available to profitable and mature businesses (Gaud et al., 2005; Amidu, 2007; Chakraborty, 2010; Vanacker and Manigart, 2010). On the other hand, comparatively new firms choose between the long terms' financial resources of debt and equity to raise funds. Other financial theories including agency and signaling reveals that a company has certain set of preferences, beliefs, values, and norms that is incorporated among its employees and managers. According to this opinion, financial choice of the firm is influenced by organizational culture because it is the culture which defines the 'right' behaviour when it is challenged with an uncertain situation and with problem having multiple choices. As firms are governed by the separate governance body, called directors, who take all decisions related to management and being human it's not possible to have same judgments and take similar decisions in identical situation because human's cannot overcome the influence of their culture (Sekely& Collins, 1988; Gray, 2013; Breuer & Nadler, 2015) argue that other than firm specific and governance related factors another variable culture of the country of origin of the firm also have effect on the choice of capital. As financial decisions of the companies are in hands of governing bodies such as CEO, chairman and directors who takes choice on bases of their values, belief, experience etc. which represent their culture. It means that corporate governance factors like board size, inside and outside directors, presence of CEO, dual role of CEO, no of female directors, managerial and institutional ownership also have strong influence in decision making process about the capital of the firm (Lim, 2012; Palacín-Sánchez, Ramírez-Herrera, & Di Pietro, 2013). Firms from dissimilar cultures behave differently in making choice of capital, as these firms are governed by board of directors who are responsible for taking decision so their culture will silently be incorporated in their decisions such as choice about finance i.e., debt or equity.

After Modigliani and Miller's work, more than half a century and an adequate body of literature, the choice of capital structure to attain an optimal level of finance, is still debatable. This optimal level is the mix of debt and equity where the WACC is minimum and profit is maximum (Toraman, Kilc, & Gul Reis, 2013). Theory has clearly made progress on the subject. There are different financial factors that affect a firm's capital structure (Mittal & Kumari, 2015) and a firm should attempt to determine

what is its optimal or the best mix of financing. The optimal level of capital structure is the level where the WACC; cost of capital; is minimum and profit of the firm is maximum (Toraman, KILIC, & GUL REIS, 2013). The work on optimization of capital structure has great importance now days.

In corporate world decisions about leverage and equity are of major concern. Research conducted by different academician and practitioners found different company specific factors such as liquidity, tangibility, size, growth, profitability, income variability, non-debt tax shield etc depicting impact on the capital structure of the firm. Leverage results of these firm specific factors show variation in different industries and geographical areas which is debatable.

The purpose of this study is to understand that how culture of a country can effects the financing decision of the firm in presence of existing determinant of corporate governance and firm specific variables. With this reference, this study is more related to Shao et al. (2010), Fidrmuc & Jacob (2010) and Li et al. (2013) and Aftab et al., (2018) who are of the view that corporate decision making is affected by national culture.

Scope of the study

This study attempts to cover the gap of literature in two ways:

- 1. The research is pioneering in a way that it uncovers the effect of national culture on decision of capital in existence of both determinants- firm and governance variables. Prior research was focused on empirical studies or either using firm or governance variables independently while the result of this study is based on secondary data of non-financial firms from developed and emerging economies using both determinants at a single point of time.
- 2. This study unfolds the secrete that either culture of emerging and developed countries effect on capital decision in same manner or the other way in the two economies. No analysis was found in prior literature on such association.

Section 2 Theories and Literature Review

2.1 Theories related with capital structure

2.1.1 Modigliani and Miller's Theory

According to Modigliani and Miller's (1958) perfect markets, it does not matter which combination of capital a corporation uses to finance its operations (Modigliani & Miller, 1958). Under their assumptions of no tax, no transactional cost, no bankruptcy cost and symmetry of market information, the cost of capital WACC should remain constant with changes in the company's capital structure.

2.1.2 Trade off Theory

In the real corporate world, Modigliani and Miller (1958) irrelevance theory's all assumptions are violated as it's not an ideal world. Firms have to pay tax, tolerate cost of capital which gives them a tax shield and markets are also inefficient. In that situation, optimal mix of capital structure matter for the decision makers where the cost of capital should be minimum. So, the trade-off theory estimates the cost and benefit analysis to achieve the targeted debt. According to the static trade off theory, profitable firms will raise more debt as its interest will give them tax shield. However, the advantages of tax savings can be an offset of the financial distress due to bankruptcy costs of the company relying on debt too much (Warner, 1977). Rajan& Zingales, 1995; Fama& French, (2002) found conflicting results to the trade off theory that firms with high profitability borrow less. These conflicting results are due to the

decision-making process by corporate governance as it is a cognitive process where the top management must choose the best available alternative based on their own believes, experiences, qualification and culture. If we consider the Hofstede cultural dimensions specifically, then we may also be able to understand the reason for these contradictory results w.r.t the trade off theory. Thus, in the determinants of capital structure other than existing company specific and governance factors, one more feature should be considered while capital decision making i.e. which is culture of that country.

2.1.3 Pecking order theory

Pecking order theory is the other projecting theory related to capital structure that focuses to finance the business operations with its internally generated sources of funds by Myer (1984). According to pecking order theory companies use internal and external finance in a hierarchy. Internal finance has preference over external, as internal finance consist of retained earning which have direct relation with distribution of income among shareholders. If management distribute major portion of income as dividend than there will be less retained earnings for finance and companies have to depend more on debt. Chen (2004) discussed Chinese firm which follow the hierarchy of revised pecking order theory; retained profit, then equity, with leverage as a last option. Oktavina et al. (2018) in Indonesia, found that owners of private firms follow the hierarchy of pecking order theory to fulfill the need of capital structure even the subsidize loans are available. In this context, Delcoure (2007) and Allini et al. (2018) argues that theories like pecking order or market timing theory are insufficient to provide a satisfactory explanation for the capital structure behavior. In the current period, where behavioral finance has taken its place, new evidence are found that some overconfident managers prefer equity over debt, hence, underestimating the future earnings as they believe that their equity is undervalued. So, they prefer to issue equity on raising debt which is violation of pecking order theory (Gervais, 2009; Vivan&xu,2018). This behavior is called "managerial bias" which is because the managers are rational and exhibit deviation from the rules according to their judgment which is either intuitional, based on their past experiences or educational etc. Intuitions are based on the culture from which the person belongs to. So, indirectly we can say that a manager's decisions are also reliant upon their cultural values. Hofstede's cultural dimensions, especially IND vs Collectivism

and uncertainty avoidance affect the company's policies for distribution of dividends and retained earnings due to which the board has to select between debt and equity. Again, this decision will be pushed by their intuitions.

2.1.4 Market Timing Theory

Baker and Wurgler, (2002) gave a statement that although other factors are important about the issuance of external finance as proposed in M&M theory, trade off theory and pecking order theory, but the most important factor is the situation of the market. Consistent with the pecking order theory, this theory also explains that the corporations do not target optimal level of leverage, rather, they take the benefit from the market situation. (Baker and Wurgler, 2002 and Frank & Goyal, 2003) were of the opinion that if market to book value of the equity is high, shares are mispriced and show overvaluation, then, firms will issue new shares. And, in case of undervaluation, they will buy back equity to concentrate the ownership. It means that capital structure does not follow the hierarchy of pecking order theory or trade off theory. Rather it depends on the market timing. The governance board analyzes that the market timing that is suitable for the issuance of debt or equity? Again, this analysis is based on the management perception about the value of the equity i.e., either it is overestimated or underestimated in the market and their opinion can be biased. According to behavioral finance biases,

overconfident and optimist manager will overvalue, and pessimist will undervalue. Their optimist or pessimist behavior is influenced by the demographic situation and culture of origin. Arosa et al. (2014) investigated the effect of Hofstede cultural dimensions on market timing theory and found significant results, indicating the impact of culture on the decision of managers in application of market timing theory. Antonczyk and Salzmann (2014) argued that the managers in countries with high level of individualism are not only overconfident but also optimist. If they show optimism about the overvaluation of equity, their preference will be equity over debt. On the other side, if they show an optimistic behavior towards the stability of future profit, their choice will be debt.

2.2 Literature review

Researchers are endeavoring to find an equilibrium between debt and equity financing in the firms where the cost of capital can be minimized in order to maximize the shareholder interest. In the following section, main variables of company, governance and culture found in literature influencing the capital structure of the company are briefly studied.

2.2.1 Company specific Factors

2.2.1.1. Liquidity

The customary point of view shows that liquidity increases the debt capacity of the firm (Williamson, 1988). According to Sibilkov (2009) firms with more liquid assets have higher tendency of long term debt. Harris & Raviv (1990) and Shleifer &Vishny (1992) found positive relationship between liquid assets and long term debt which is consistent with trade off and bankruptcy theories. Contrary to these theories, pecking order theory, signaling theory and free cash flow theory expects a negative relation with leverage. Deesomsak et al. (2004), Sheikh and Wang (2011), Ozkan (2001) Sheikh (2015) and Khaki & Akin (2020) supports the negative relation between liquidity and leverage.

Hypothesis 1. There is a positive relationship between liquidity and leverage.

2.2.1.2. Growth

As the business grows, its required finance is inclined to a surge. To meet this increasing demand, mature firms use either internal or external finances. Myers (1977) argued that growth increases firm's assets but every time it is not in tangible form so firms may not have more collateral. So, absence of collaterals debts will be acquired at higher cost increasing the chances of insolvency and distress. Hence, even in growth phase, firms may not acquire any debt. A number of scholar's findings support the negative relation of growth opportunities with leverage. Kim & Sorensen (1986), Rajan and Zingales (1995), Allen (1995), Ozkan (2001), Barclay & Smith (2005), Gaud et al. (2005); Huang, 2006; Akhtar & Oliver, 2009; Frank & Goyal, 2009; Sheikh & Wang, 2011; Handoo & Sharman (2014), Granado& López (2017),Inderst & Vladimirov (2019) and Moradi & Paulet (2019) indorse the abovementioned theoretical and empirical outcomes. But supporters of signaling theory (Lang et al.(1996), Wald (1999), Chen (2004) and Khaki & Akin (2020) argues that the firms with high earnings and growth opportunities engage in high leverage due to their strong position in the market.

Hypothesis 2. There is a negative relationship between growth and leverage.

2.2.1.3 Tangibility (TANG);

Non-current assets of the company are used in the business to generate profit but on the other side, these assets can also be used as a collateral to acquire debt from banks or lenders. According to the

theories of capital structure i.e. trade off theory, agency theory and bankruptcy theory, higher available collaterals result in more ability of the firms to acquire a loan at lower rates as firms are in a much stronger bargaining power with the lending institutions. This also reduces the distress cost and bankruptcy cost Chen et al. (1998), Marsh (1982), Titman and Wessels (1988), Rajan and Zingales (1995), Michaelas et al. (1999), Huang (2006), Lemmon et al. (2008), Hovakimian & Li (2011), Alipour et al. (2015), Moradi & Paulet (2019) and Khaki & Akin (2020) confirm the positive relation of tangibility and leverage. Contrary to the above scholars' findings, various academicians found a negative relation proving the application of pecking order theory Karadeniz et al., (2009). Deesomsak et al. (2004) and Granado & López(2017) found an inverse relation between tangibility and debt.

Hypothesis 3. There is a positive relationship between tangibility and leverage.

2.2.1.4 Firm's Size (SIZE)

Capitalization is used to measure the size of the firm, it is the market value of outstanding shares of the company. Contradiction of theories persist here again, trade off theory shows a positive relation and pecking order theory's indication is negative for the two variables i.e. leverage and size of the firm. Arguing in favor of the tradeoff theories, as the size of the firm increases, due to economies of scale, firms consider their bargaining power on the cost of debt with the lenders as they have more assets to use as collateral and the cost associated with bankruptcy decreases, more cash flows is available. So, according to trade of theory expected relation between the two variables is positive .Agrawal & Harris & Raviv (1991), Berger et. al. (1997), Graham et al. (1998), Nagarajan, (1990), Wiwattanakantang (1999), Baker & Wurgler (2002), Gaud, et al. (2005), Frank & Goyal (2009), Sheikh & Wang (2012), Granado& López(2017), Moradi & Paulet (2019), Li & Islam (2019) and Khaki & Akin (2020) found direct relation between the size and leverage of firm. Fama and Jensen (1983) proved a negative relation arguing that by the increase in size, agency issues increase as well and to avoid more disclosures of information for acquiring a debt , firms prefer to issue equity instead (Kim and Sorensen, 1986). Rajan and Zingales (1995), Chen (2004) and Kurshev & Strebulaev (2015) thus found a negative relation.

Hypothesis 4. There is a negative relationship between size and leverage.

2.2.1.5 Profitability (PROF)

According to Pecking order theory, profitable firms have retained earnings as the source of finances it is not only a risk free investment rather it increases the confidence of the investor. Scholars suggested that highly profitable firms use internal source of financing in order to avoid information symmetry and cost of external debt. Titman & Wessels (1988), Friend& Lang (1988), Amihud et al. (1990), Allen (1991), Rajan& Zingales (1995), Chen et al. (1998), Sunder & Myers (1999), Booth et al. |(2001), Fama& French (2002), Chen (2004), Chen & Strange (2005), Gaud et al. (2005), Kim& Berger (2008), Frank & Goyal (2009), Sheikh and Wang (2011), Hovakimian& Li, (2011), Ke&Xiong (2016), Granado& López(2017), Allini et al. (2018), Moradi & Paulet (2019) and Khaki & Akin (2020) found negative relation between profitability and debt.

Opposite to this, trade off theory argues that to take the advantage of tax shield, profitable firms include more debt in its capital. Free cash flow theory, signaling theory, cost of distress and bankruptcy theory are also in favor of higher debt due to a positive and strong negotiating power of these profitable firms. Frank & Goyal. (2009) thus found a positive relation between the profit and debt of the firm.

Hypothesis 5. There is a negative relationship between profitability and leverage.

2.2.2 Corporate Governance

Literature provides evidence that apart from financial factors, some non-financial factors such as attributes of corporate governance also effect the financial decision of a firm (Sheikh & Wang, 2012). These factors include board size, gender diversification and presence of external directors.

2.2.2.1. Board size (BSZ)

Board size represent the alogarithm of the number of directors present on the board. In the literature, it is debatable whether a firm should have larger or smaller board and how the size of board effects leverage decision. According to Agency Theory, larger board depicts lower efficiency because of the conflicts in decision making, meaningless discussions, and time consumption during quick decision making, more lobbying and presence of free riders who enjoy the benefits at the cost of others. Berger et al. (1997), Mak&Kusnadi (2005), Abor and Biekpe (2007), Hassan and Butt (2009), Granado&López(2017), Yusuf & Sulung, 2019; Guney et al., 2020) found a negative relation between board size and leverage. Antagonistically, literature also proves a positive relation between board size and leverage. Scholars argue that it is consistent with the resource dependence theory, suggesting that a larger board takes advantage of its diversified knowledge, skills and experience. Jensen (1986), Anderson et al. (2004), Abor (2007), Bokpin and Arko (2009), Sheikh and Wang (2012), Pham & Nguyen (2019) and Nguyen et al.(2020) have depicted positive relation between board size and debt.

Hypothesis 6. There is a negative relationship between board size and leverage.

2.2.2.1Representation of Female in Board

Gender diversity debates on the fair representation of different genders in various aspects of life. Narrowing the focus of gender diversity on corporate governance, the presence of female segment in top management is very small in terms of number. It is a common belief around the globe that women are generally risk averse, more emotional, lack decision power and do not have a strategic mindset due to which they cannot take good business decisions. Thus, the presence of females in the top management of the firm gives adverse signals to the investors, providing the females less access to debt, leading the firm performance toward decline (Chaudhuri et al, 2020). General findings of scholars about a female's choice of capital shows that females are risk averse, they prefer lower debt to avoid the problems of insolvency, Mirza et al (2012) and Faccio et al. (2016).

Alves et al (2015) and Nguyen et al. (2020) a found positive relation between gender diversity and risky securities, believing that increase in monitoring and disclosure of information shows more trust of credit firms on these businesses. Jurkus et al. (2011) studied the relation of gender diversity with agency cost and found an inverse relation meaning that the cost will lead to a lower level of debt. Vu et al. (2018) in Vietnam found that the presence of a female director shows an insignificant effect on the firm's performance i.e. gender diversity does not matter in the firm's financial decisions. Rose, (2007), Matsa& Miller (2013), Isidro &Sobral (2015), Gordini &Rancati (2017) and Granado& López (2017) also found insignificant results between female directors and capital decision of the firm.

Hypothesis 7. There is a positive relationship between gender diversity and leverage.

2.2.2.3. Independent directors

These are the board members having no material interest or relation with the company other than their salary. They are appointed by the shareholders to increase monitoring and reduce the agency cost resulting in board efficiency and more information symmetry hence, giving positive signals to the market about the firm's performance. It also reduces the distress and bankruptcy cost. Pfeffer and Salancick (1978), Fama and Jensen (1983), Vafeas, (2000), Ajinkya et al. (2005), Petra (2007), Kanagaretnam et al. (2007), Alves et al. (2007), Butt & Hasan (2009) and Dimitropoulos and Asteriou (2010). Trade off theory suggests that where agency and bankruptcy cost is lower, the managers' choice for capital is usually debt financing. Jensen (1986); Berger et al (1997), Abor and Biekpe (2007), Sheikh & Wang (2012), Granado& López (2017), Pham & Nguyen (2019) and Nguyen et al. (2020) are aligned with the tradeoff theory, displaying a positive relation between independent directors and leverage. In contrast with the conclusion of the above scholars, (Masulis& Zhang, 2019) found that outside directors are not committed to the board. They attend a few meetings. And because of the turnover, this results in inadequate knowledge and experience of the board hence, hindering the effective performance of the board. In view of Abor and Biekpe (2007) a firm's board with less knowledge and experience has a lower level of gearing. At the same time, managers are under rigorous supervision of external directors. So, issuing risky securities increases their problems. As monitoring also increases the firm's value, the choice of managers is retained earnings for reinvestment to avoid the increased risk. Frank and Goyal (2008), Anderson et al. (2004); Kuo et al (2012), Purag and Abdullah (2016), found an inverse relation between outside directors and long term debt. There are also many otherscholars who found insignificant results between the board independence and leverage i.e. Mehran (1992); Coleman and Biekpe (2006) Bokpin and Arko, (2009), Hassan and butt (2009) and Pamba (2013) found no significant relation, showing that the presence of independent directors does not affect the leverage.

Hypothesis. There is a positive relationship between independent directors and leverage.

2.3 Cultural Dimensions

Above discussed predictors of capital structure at company and governance level perform differently in the choice of capital which shows that in the presence of any hidden variable, it may be the culture of the country. Cultural values and norms also aid in forecasting the capital structure of the companies of a particular country. In this regard Breuer & Quinten (2009) concluded that there exists a gap in the theoretical approaches that link the economic and finance theories implicitly to the cultural aspects. In view of Ahunov& Van, (2020) these cultural dimensions matter more than the economic variables and help in understanding the financial literacy. In this perspective, Nadler & Breuer, (2019) found that Cultural Finance revisit the already well-studied questions of traditional finance in a unique manner. In present study, we took all Hofstede's cultural dimensions excluding indulgence as it is a newly incorporated dimension.

2.2.3.1. Power Distance (PD)

Degree to which individuals of a society accepts discrimination in their environments is defined as power distance. Inequality prevails in every society. Whether it is high or low, depends on the culture of the society. Senior members are respected in following their decisions from juniors irrespective of their competence (Khatri, 2009). The corporate sector, where decisions making lies in the hands of few

people at the top management, autocratic style is followed. Gleason et al, (2000) argues that countries with high power distance index are monocratic as they have autonomy. Managers prefer to issue equity over debt. Dyer and Chu (2003), Aggarwal & Goodell (2009) and Zheng et al. (2012) said that societies with higher values of PD have lower trust. Henceforth, less disclosure of information increases the cost of debt, discouraging the issuance of non-current liability. Bhaird and Lucy (2014) explored that societies with higher power distance embraces respect, authority and hierarchy. Banks are more powerful as compared to firms, as these firms request for loans from the banks. Making a request shows the mastery of the banks and according to Chui et al. (2002) "mastery" dimension is the same as PD in Hofstede's cultural dimensions. Their findings suggest that there is a negative relation between PD and debt. (Wang and Esquesa, 2014; Boubakri and Saffar, 2016 andWillemink, 2018;) findings are also consistent with Dyer and Chu (2003;) Aggarwal and Goodell, 2009 and Zheng et al., 2012; Bhaird and Lucy (2014) showing negative relation between power distance and debt.

Hypothesis 8. There is a negative relationship between power distance and leverage.

2.2.3.2. Individualism (IDV) vs Collectivism can be defined as the degree to which people favor their own interest when they are formally independent, self-sufficient and autonomous in decision making, overconfident about the information they have and believe in abilities to control the situation, Yates et al. (2016). Specifically relating it with capital structure, there is a higher tendency of debt in individualistic cultures because their management prefers their own interest and will enjoy the benefit of lower cost of capital and use it as a shield of tax associated with leverage (Gleason et al. 2000). These managers are not willing to sacrifice their autonomous positions and avoid the involvement of external financers. Hence, their choice for capital is equity over debt (Chui et al, 2010; Bhaird and Lucy, 2014). Contrary to these findings, (Gray et al., 2013; Wang and Esquesa, 2014; Boubakri and Saffar, 2016 and Willemink, 2018) found a positive relation between individualism and debt.

Hypothesis 10. There is a negative relationship between individualism and leverage.

2.2.3.3. Uncertainty avoidance:

It means some societies show a risk averse behavior and others show risk taking tendencies. Culture of risk taking exists where people of that society feel easiness in working with unpredicted circumstances, have the ability to cope up with uncertain conditions and can change their strategy in a dynamic environment. While the societies with lower scores of risk taking work on set rules and policies and avoid unpredictable circumstances. They strictly follow their plans and try to avoid uncertain situations (Chang et al., 2012). These people do not like risky investment because debt can increase their bankruptcy chances (Gleason et al., 2000 and Arose 2014). From these arguments it can be concluded that countries with higher score of UAI prefer equity over debt. (Knight ,2009; Kearney et al,2012; Bhaird&Lucy, 2014; Wang and Esquesa, 2014; Im& Shon, 2020) also found an inverse relation between UAI and leverage of the firm. Contrary to this, some researchers argue that societies with higher values of UAI are more rule-oriented, do not accept change easily and take less risk (Chang et al., 2012). So firms in this culture retain complete accounting disclosures, reducing the mortgagor's financial risk, thus making debt more attractive. (Kwok and Tadesse (2006) found that firms existing in the culture of higher UAI rely more on debt from bank rather equity market. Zheng et al. (2012) found positive relation for short term debt while (Boubakri and Saffar, 2016 and Willemink, 2018) also found a positive relation between the UAI and leverage.

Hypothesis 11. There is a negative relationship between UAI and leverage.

2.2.3.4. Masculine (MAS) cultures show different directions for men and women as compared to feminine cultures. In Hofstede's masculine culture, males are dominant, more powerful with strong leadership qualities, responsible for taking all kind of decisions followed by female members, more assertive, independent and risk takers. Their risk seeking behavior shows their desire to make growth by introducing more debt in capital structure (Willemink, 2018). De Jong and Semenov (2002)argued in favour of increased debt that as the regulatery bodies of masculine societies encourge the competetion in financial system so they also have strong policies for shareholders' rights protection. In the presence of strong regulatory bodies and disclosure of information, mangers feel confident to take more loans for growth of the firm. (Malmendier et al ,2011; Zheng et al. 2012 ;Boubakri and Saffar, 2016 and Haq et al., 2018 ,) also found a positive relation between Masculanity and debt .

Opposing this, (Chui et al., 2002 and Lin et al, 2010) argued that managers who aim for mastery, are inclined towards uncertainty avoidance and avoid debt financing as they stress upon control, more authority and individual success. They avoid the disclosures of information which increases the cost of debt. Hirshleifer and Thakor (1992) found that the managers belonging to maaculine cultures care about their own performance so they choose relatively safer projects with a high probability of success and hence, prefer equity over debt.

Hypothesis 12. There is a negative relationship between masculinity and leverage.

Section 3

3.1 Empirical Results for Developed vs Emerging countries

To get more in depth understanding of the study and to find out either culture effects in same way in different economies such as developed and emerging countries, sample date is divided into two groups

- 1) Set of developed countries includes Turkey, Italy and Canada.
- 2) Set of Emerging countries includes Pakistan, India and Bangladesh

Fifty companies from each country are selected with respect to highest market capitalization in the fiscal year 2016. The final sample consisted of 3210 firms/year observations of 300 companies for the period 2006–2016 Data was collected through Datastream (Thomson Reuters) database of listed non-financial companies. Independent variables include liquidity ratio (current ratio), growth (market to book value), profitability (PBIT/total assets), tangibility (tangible Assets/Total Assets), leverage (non-current liability/total equity or total Assets) and LS (log of size). Furthermore, data related to corporate governance variables such as board size, independent directors and presence of female directors were collected from the annual reports of the firms on annual bases. Apart from that, Hofstede's cultural dimensions i.e. power distance, individualism, masculinity and uncertainty avoidance were taken into account for the analysis. All the values ranged from 0 to 100, with higher scores indicating more influence of a specific variable in a specific country.

3.2 Data Analysis

The collected data was analyzed through E views by using descriptive statistics, correlation matrix and panel data.

Regression Model to Measure the Impact of Cultural Dimensions on Capital Structure of the firm in Developed and Emerging Countries

In this segment, hypotheses H1, H2, H3, H4, H5, H6, H7, H9, H10, H12, H13, H14, H15 and H16 are analyzed through following equations.

LVG_{i,t}=
$$\beta_0$$
 + β_1 LVG(-1)_{i,t}+ β_2 CUR_{i,t} + β_3 TANGIBILITY_{i,t} + β_4 PROFITABILITY_{i,t}+ β_5 LS_{i,t}+ β_6 GROWTH_{i,t}+ β_4 PROFITABILITY_{i,t}+ β_5 LS_{i,t}+ β_6 GROWTH (3.1)

LVG_{i,t} =
$$\beta_0$$
 + β_1 LVG(-1)_{i,t}+ β_2 CUR _{i,t} + β_3 TANGIBILITY _{i,t} + β_4 PROFITABILITY _{i,t} + β_5 LS _{i,t} + β_6 GROWTH _{i,t} + β_7 BSZ_{i,t} + + β_{10} FEMALE _{i,t} + β_{12} INDP DIR _{i,t} + $\mu_{i,t}$ (3.2)

LVG_{i,t} =
$$\beta_0$$
 + β_1 LVG(-1)_{i,t}+ β_2 CUR _{i,t} + β_3 TANGIBILITY _{i,t} + β_4 PROFITABILITY _{i,t} + β_5 LS _{i,t} + β_6 GROWTH _{i,t} + β_7 BSZ_{i,t} + + β_{10} FEMALE _{i,t} + β_{12} INDP DIR _{i,t} + β_{14} MAS _{i,t}+ β_{15} UNC_AVOI _{i,t} + β_{16} IND _{i,t} + β_{17} PD _{i,t}+ μ _{i,t} (3.3)

Equation (3.1), (3.2) and (3.3) will be used to examine the effect of culture on capital structure in separate groups of developed and emerging countries.

3.3 Descriptive statistics and Correlation Matrix For developed and Emerging Countries

Table 3.1 Descriptive statistics of Emerging Countries

	Mean	Median	Maximum	Minimum	Std.dev
CUR_RATIO	1.6176	1.2900	10.5400	0.1400	1.1019
PROFITABILITY	0.1474	0.1208	4.8254	-0.3253	0.1768
TANGIBILITY	0.4320	0.4229	0.99	0.0123	0.2234
LS	7.4618	7.4336	9.2327	5.1756	0.6628
GROWTH	4.4822	2.1300	72.64	-32.1500	32.5253
BSZ	8.7213	8.0000	18.0000	3.0000	2.9069
FEMALE	0.4133	0.000	3.000	0.0000	0.6359
INDP_DIR	2.5909	2.0000	11.0000	0.0000	2.5395
MAS	53.4040	55.000	56.000	50.000	2.7806
UNC_AVOI	53.3131	60.000	70.000	40.000	13.7084

Effect of Culture on Capital Structure of Developed and Emerging Countries

IND	28.3266	20.0000	48.0000	14.0000	15.6437
PD	68.9629	77.0000	80.0000	55.0000	11.3576

3.2 Descriptive statistics (Developed countries)

	Mean	Median	Maximum	Minimum	Std.dev
CUR_RATIO	1.5496	1.2900	20.9500	0.1300	1.1340
PROFITABILITY	0.1000	0.0900	0.5900	-7.3300	0.4170
TANGIBILITY	0.3256	0.2970	0.9900	0.0100	0.2300
LS	6.4870	6.4682	8.7311	3.6389	0.6457
GROWTH	2.7095	1.9000	46.0900	-19.0400	3.8126
BSZ	9.7372	9.0000	21.0000	4.0000	3.2096
Female	1.5597	1.0000	14.0000	0.0000	1.3012
INDP_DIR	5.3876	5.0000	17.0000	0.0000	3.0947
MAS	41.8497	45.0000	70.0000	8.0000	18.4600
UNC_AVOI	67.9620	75.0000	86.0000	48.0000	15.4149
IND	62.3929	63.0000	80.0000	37.0000	14.8244
PD	46.3549	50.0000	66.0000	31.0000	12.5819

Comparing the descriptive statistics of emerging and developed countries data explore some interesting points that developed country's liquidity position, profitability, tangibility, size of business and growth in MV to BV is lower as compared to emerging countries. These all-firm specific factors have higher values for emerging countries and lower for developed. But the governance factors are at better side in developed countries as the board size, number of female directors, independent directors are higher in numbers in developed countries, cultural dimensions also show the lower values of Masculinity and PD, from lower masculinity we can understand the presence of larger number of females in the firms of developed countries. In developed nations people show higher trend toward planning and show better tendency toward uncertainty avoidance, these people also show lower acceptance toward the superior role of others in the society which automatically will be inherited toward the corporate sector. From the above data it is visible that with more ability to pay short term debt, higher profitability, with more tangible assets and growth in MV of shares and larger size of business countries cannot be enlisted in developed nations rather the mindset and the people in management leads the firm toward better performance.

Table 3.3 Correlation matrix for Emerging Countries

	LEAVERAGE	CUR_		TANG	PROFIT				INDP		I
	(-1)	RATIO	GROWTH	IBILITY	ABILITY	LS	BSZ	FEMALE	_DIR	MAS	Α
LEAVERAGE (- 1)	1										
CUR_RATIO	-0.12	1									
GROWTH	0.06735	-0.031	1								
TANGIBILITY	0.3642	-0.2847	0.0473	1							
PROFITABILITY	0.0748	0.3057	0.0122	-0.1592	1						
LS	0.0111	0.0435	0.0443	-0.016	0.0937	1					
BSZ	0.0454	-0.1024	-0.0448	0.0858	-0.0802	0.3242	1				
FEMALE	-0.0415	0.0302	-0.0052	0.0495	0.0349	0.0043	0.0185	1			
INDP_DIR	0.1047	-0.1628	-0.023	0.0444	-0.1394	0.1628	0.5667	0.0463	1		
MAS	-0.1997	-0.1453	0.0189	0.0878	-0.1416	0.1494	0.2983	0.036	0.6041	1	
UNC_AVOI	0.2045	0.2004	-0.0222	-0.0779	0.1702	0.2247	-0.392	0.0128	0.7579	0.8961	1
IND	0.1225	-0.2093	0.0223	0.0714	-0.172	0.2389	0.4049	-0.0278	0.7742	0.825	-(
PD	0.1225	-0.1046	0.0156	0.0859	-0.115	0.0978	0.2248	0.0586	0.4741	0.9726)۔

Note: This table describes correlation matrix for firm specific variables LVG (-1) lag of Leverage, liquidity (CUR_RATIO), growth, tangibility, profitability, LS (size, Ln of assets), board size (BSZ), Number of female director (FEMALE), Number of Independent Directors (INDP_DIR), PD (Power Distance), Masculinity (MAS), Uncertainty Avoidance (UNC_AVOI), Individualism (IND) and Indulgence (INDLG).

Correlation matrix for developed countries

Table 3.4

LEAVER CUR_ TANG PROFIT INDP

	AGE(-1)	RATIO	GROWTH	IBILITY	ABILITY	LS	BSZ	FEMALE _DIR	
LEAVERAGE(-1)	1								
CUR_RATIO	-0.0657	1							
GROWTH	-0.0058	-0.0065	1						
TANGIBILITY	-0.0237	-0.1135	-0.0065	1					
PROFITABILITY	-0.0317	0.0192	0.8105	0.0028	1				

LS	-0.0912	-0.0742	0.0957	0.2374	0.1740	1				
BSZ	0.0899	-0.2027	0.0453	0.0721	0.0307	.2942	1			
FEMALE	0.0647	0.0239	0.0150	0.0042	-0.0091	.2822	0.1799	1		
INDP_DIR	0.0020	-0.0965	0.0217	0.1660	-0.0267	.3197	0.3946	0.3720	1	
MAS	0.0899	0.0952	-0.0157	0.0159	.0271	0.0974	0.3784	-0.3100	0.0981	1
UNC_AVOI	0.0230	-0.0811	0.0397	-0.1201	.0799	0.1644	0.2036	-0.3274	0.5485	C
IND	0.0593	-0.0220	-0.0367	0.0713	0659	0.1132	0.0838	0.2173	0.5273	C
						-				
PD	0.0133	-0.0384	0.0196	-0.0259	0.0622	0.0684	0.2532	-0.3580	0.5257	C

Note: This table describes correlation matrix for firm specific variables LVG (-1) lag of Leverage, liquidity (CUR_RATIO), growth, tangibility, profitability, LS (size, Ln of assets), board size (BSZ), Number of female director (FEMALE), Number of Independent Directors (INDP_DIR), PD (Power Distance), Masculinity (MAS), Uncertainty Avoidance (UNC_AVOI), Individualism (IND) and Indulgence (INDLG) (LTO).

3.4 Regression Results for Developed and Emerging Economies

(i) Impact of company specific factors on capital structure of Developed and Emerging Countries

To Find the relation of firm specific factors and Capital structure of Developed and emerging countries equation (3.1) is regressed to explore the outcomes

Table 3.5 Impact of Firm Specific Variables on Developed Countries

Variables	coefficient	Std.Error	t -statistics	Prob.
С	0.0224	0.0053	4.2125	0.0000
LEVERAGE(-1)	0.9176	0.0078	117.2365	0.0000
CUR RATIO	-0.0018	0.0006	-2.8821	0.0040
PROFITABILITY	-0.0001	0.0001	-1.1899	0.2342
TANGIBILITY	0.0315	0.0044	7.0365	0.0000
LS	-0.0018	0.0007	-2.5435	0.0110
GROWTH	-0.0002	0.0002	-0.5901	0.5551
Adj R Sq	0.9361			

S.E of regression 0.1540

Prob (F stat) 0.0000

Table 3.6 Impact of Firm Specific Variables on Emerging Countries

Variables	0 (0)	1.5	t	D 1	
	Coefficient	std.Error	statistics	Prob.	
С	-0.0199	0.0073	-2.7134	0.0068	
LEVERAGE(-1)	0.8797	0.0169	51.8975	0.0000	
CUR RATIO	-0.0005	0.0002	-2.0047	0.0452	
PROFITABILITY	-0.025	0.0057	-4.3494	0.0000	
TANGIBILITY	0.0338	0.0047	7.0863	0.0000	
LS	0.003	0.001	2.9498	0.0032	
GROWTH	-0.00001	-0.0001	-0.2326	0.8161	
Adj R Sq	0.9291				
S.E of regression	0.0941				
Prob (F stat)	0.0000				

Theses tables shows the findings of company specific factors in both developed and emerging countries screening mostly same signs, and all are significant except growth which shows insignificant effect in both groups. Long-term debt of previous years, liquidity, profitability, tangibility and size of business shows significant effect on the choice of capital in both sets. Leverage shows a positive relation with leverage(-1) which means companies having more prior non-current liability in their financial statements have awareness about its benefit so they prefer to acquire more long term debt .Current ratio shows negative relation with leverage, it is consistent with pecking order theory, signaling theory and free cash flow theory supposing negative relation with leverage arguing that managers of the liquid firms will increase their reserves and use these reserves as 1st priority for reinvestment which will also be a signal in the market that firm have ability to utilize its resources efficiently, resulting the increased value of firm. Similarly, tangibility shows a positive relation with leverage as well. This result of tangibility and size of business are consistent with the tradeoff theory, agency theory and bankruptcy theory i.e., by increase in the value of tangible assets, firms have more collateral for leverage, and they get the benefit of tax shield by taking long term loans from the banks. Contrary to this, profitability shows a negative relation following POT, although profitability results are significant in emerging economies and vice versa for developed. Arguing in its favor scholars says that larger companies have more retained earnings, and their expansion requirements are full filled from their own resources, so they demand less for long term debt.

Size of business (LS) depicts opposite signs for both groups i.e., positive for emerging and negative for developed, which shows that in term of business growth emerging economies follows tradeoff theory,

agency theory and bankruptcy theory i.e., by increase in the size of business firms have more tangible assets and more collateral for leverage, and they get the benefit of tax shield by taking long term loans from the banks. But in developed countries it's not the pattern as they are mostly in tertiary sector where growth in tangible assets is not as much as in secondary sector, so we found negative relation. From the above results it can be generalized that financial factors effect mostly in same way in all firms w.r.t capital decision, either the firm belongs from developed or emerging countries.

It means if business decisions are based on past indicators of the financial statement all firms with high gearing, more tangible assets and larger size of business will prefer long term debt over equity in their capital structure. Contrary to this we see different pattern of capital structure in all firms which indicate the presence of other factors influencing the decision of capital in firms.

(ii) Impact of Corporate governance on Capital Structure of Developed and Emerging Countries

Model 3.2 regressed the variables of Developed and Emerging group separately. Following results depicts the effect of Governance on Capital structure in both groups.

Table 3.7

Impact of Governance on capital structure of emerging countries

Variables	coefficient	std.Error	t statistics	Prob.
С	0.8818	0.0089	98.4385	0.657
			,	
LEVERAGE(-1)	-0.0048	0.0109	0.44445	0.000
CUR RATIO	-0.0001	0.0003	-0.1944	0.846
PROFITABILITY	-0.1095	0.01145	-9.5643	0.000
TANGIBILITY	0.0353	0.0035	9.8629	0.000
LS	0.0021	0.0017	1.2075	0.227
GROWTH	0.0006	0.0002	2.0771	0.038
B.SIZE	0.0010	0.0003	3.1030	0.002
FEMALE	-0.0001	0.0007	-0.1441	0.886
IND DIR	0.0001	0.0002	0.3509	0.726
R Sq	0.9301			
S.E of regression	0.0924			

Prob (F stat) 0.0000

Table 3.8 Impact of Governance on capital structure of Emerging countries

37 • 11			t	
Variables	coefficient	std.Error	statistics	Prob.
С	-0.0166	0.0064	-2.5925	0.0960
LEVERAGE(-1)	0.08733	0.0194	44.8491	0.0000
CUR RATIO	-0.0001	0.0003	-0.2878	0.7735
PROFITABILITY	-0.0245	0.0053	-4.5898	0.0000
TANGIBILITY	0.029	0.0048	6.0495	0.0000
LS	0.0018	0.0009	1.9903	0.0468
GROWTH	-0.00001	0.00001	-0.2232	0.8234
B.SIZE	0.0004	0.0001	2.7048	0.0069
FEMALE	-0.0004	0.0002	-1.777	0.0758
IND DIR	0.0014	0.0003	4.4141	0.0000
R Sq	0.9466			
S.E of regression	0.0946			
Prob (F stat)	0.0000			

By incorporating the governance variables i.e., total no. of directors, no of female directors' and no of independent directors from developed and emerging countries along with firm specific variables. All three variables have same signs in both groups, positive for board size and independent directors and negative for no of females. In developed countries just board size have significant effect on capital decision while in emerging all three governance variables are found significant, Larger board size and more number of independent directors displays positive relation with the leverage, while increased number of female directors have negative relation which is consistent with prior notion that females are risk averse, and they avoid leverage. For board size these results are consistent with the resource dependence theory arguing that larger board have diversified knowledge and experience which help in optimizing capital structure, also in the presence of larger board creditors confidence increases that larger board with diversified knowledge will be more efficient and will effectively play their role of governance. These findings are consistent with the findings of Abor (2007) and Alves et al (2015) who found a positive relation with board size and long-term debt.

For female directors, it is a social belief that women are risk averse and avoid debt in their capital structure. Our findings are in aligned with the results of Carter& Cannon (1992) who found that women mostly run business where they require less debt to avoid the chances of bankruptcy as they are reluctant to provide assets for mortgage purpose. As independent directors have no interest in firm other than monitoring, so their judgements are unbiased and based in favor of shareholders rights. With increased monitoring the trust of shareholders and creditors will increase, and the firms can get loan on lower interest rate which shows positive relation with increased no of outside directors and leverage. Findings for above groups of developed and emerging countries are inconsistence with the above notion that leverage of the firm will increase with more no of outside directors.

From the comparison of developed and emerging countries governance variable board size, no of female directors and outside directors' effect in same way on all firms irrespective of their group. Above findings can be generalized as if some firms have same size of board with same no of female and outside directors their long-term debt will be same. But when we observe the capital structure of firms with same board size, no of female and outside directors we observe different level of debt in their capital which shows there are some other factors other than firm and governance variable which effect their capital decision.

(iii) Impact of Culture on capital Structure of Developed and Emerging countries

Above mentioned relation between the variables is regressed through equation (3.5.9) for developed and emerging groups in two separate sets.

Table 3.9 Impact of Culture on Capital structure of Developed Countries

Variables	coefficient	std.Error	t statistics	Prob
С	-0.04139	0.0097	90.1352	0.1662
LEVERAGE(-1)	0.8745	0.0298	-1.3850	0.0000
CUR RATIO	0.0002	0.0003	0.7244	0.4689
PROFITABILITY	-0.1116	0.0146	-7.6094	0.0000
TANGIBILITY	0.0336	0.0051	6.5641	0.0000
LS	0.0087	0.0019	4.5661	0.0000
GROWTH	0.0003	0.0003	1.0739	0.2830
B.SIZE	0.0006	0.0004	1.4242	0.1545
FEMALE	0.0009	0.0008	1.104	0.2697
IND DIR	-0.0017	0.0004	-3.7632	0.0002
MAS	0.0008	0.0001	5.6929	0.0000
UNC AVOI	0.0006	0.0002	2.8619	0.0043
PD	-0.0014	0.0003	-4.5862	0.0000

IND	0.00001	0.0002	0.0223	0.9822
R Sq	0.9369			
S.E of regression	0.0917			
Prob (F stat)	0.0000			

Table 3.10 Impact of Culture on Capital structure of Emerging Countries

Variables	coefficient	std.Error	t statistics	Prob
С	3.7457	1.5886	2.3578	0.0185
LEVERAGE(-1)	0.8639	0.0185	46.5559	0
CUR RATIO	0.0011	0.0005	1.9065	0.0568
PROFITABILITY	-0.0294	0.0058	-5.0429	0
TANGIBILITY	0.0286	0.0055	5.1337	0
LS	0.0010	0.0009	1.0116	0.3119
GROWTH	0.0001	0.0001	1.3893	0.165
B.SIZE	0.0005	0.0002	2.4525	0.0143
FEMALE	-0.0001	0.0003	-0.2797	0.7797
IND DIR	-0.0001	0.0005	-0.1268	0.8991
MAS	-0.0031	0.0014	-2.1531	0.0314
UNC AVOI	-0.0001	0.00002	-2.2114	0.0272
PD	-0.0496	0.0229	-2.1917	0.0308
IND	-0.00004	0.00001	-2.1619	0.0286
R Sq	0.9395			
S.E of regression	0.0937			
Prob (F stat)	0.0000			

The tabular summary clarifies that all four cultural dimensions of Hofstede i.e., masculinity, individualism, uncertainty avoidance and PD show significant results for both groups of developed and emerging countries. IND effect is significant in emerging economy but insignificant for developed. Other results are significant for cultural dimensions which means these dimensions' effect on the decision of leverage, but the signs or coefficients are opposite for some dimension in two groups i.e., uncertainty avoidance and individualism.

3.5 Summery

This means that national culture has a vital effect on the management's decision about the choice of capital structure. In emerging countries uncertainty avoidance, power distance and individualism show a negative and Masculinity depicts positive relation with leverage. Results of the sample from developed countries have positive beta for MAS, Unc_avoi and IND and negative for PD.

In tabular form it can be compared as

<u>Table 3.11 summary of Cultural Dimensions on Capital structure in Developed and Emerging countries</u>

Hofstede	Mean	Mean	Beta in	Beta in
dimension	value for	Value for	emerging	developed
	Emerging	Develope	Countries	countries
	countries	d		
		countries		
MAS	53.40	41.84	-ve	+ve
Unc_avoi	53.31	67.96	-ve	+ve
PD	68.96	46.35	-ve	-ve
IND	28.32	62.39	-ve	+ve

From the above table masculinity culture is comparatively higher in emerging countries as compared to developed countries, so the level of debt is lower in emerging as compared to developed. This inequality of gender in both group is elobrated by Jayachandran.S (2015) that in culture of emerging countries Patrilocality, Old-Age Support from Sons, Patrilineality becomes the base of masculinity from the early life of the child where both male female accept this value making it part of their culture. Prior literature supports this theory as the findings of Chui et al. (2002) and Lin et al. (2010), Hirshleifer and Thakor (1992), Zheng et al. (2012) found negative relation in the masculine societies with long term debt due to individual goals getting more importance than collective goals, also in these societies manager don't want to share information and lose control which can affect their autonomous position so they prefer safer project with lower risk and their 1st choice of capital is equity. Conflicting to this, societies with lower masculinity show less ego and have more sharing of information, as collective goals have priority in culture so there is elevated monitoring which increases the trust of both the managers and creditors on the performance of the firm so to take the advantage of tax shield firms prefer long term debt over equity.

Uncertainty avoidance measures the ability of the people to tolerate the unpredictable situation in a specific society, literature shows harmony with this definition and defines further that societies with higher scores follow strict rules and norm, they prepare their accounts and have full disclosure of financial statements to avoid any unseen circumstances which also reduces the borrower's financial risk, making debt more attractive for them. Here in the above table the mean vaue of masculinity is higher in developed countries and this group shows positive relation with leverage ,previous research findings of Chang et al., 2012), Boubakri and Saffa (2016) and Willemink, (2018) support these results ,comparison to this, emerging countries have lower mean value of uncertainty avoidance, don't give too much importance to complete documentation and disclosure of information, in absence of valid and complete set of financial statements mangers hesitate to take risk specifically when emerging countries

also have masculine society where managers choose safer projects in order to avoid any failure in the list of their successful stories.

In Individualistic societies people are independent, self-sufficient, autonomous and overconfident to some extent about their abilities, they have loose connection with others and achieve their goals even on the cost of others interests. In the above table developed countries on average have higher score of Individualism (IND) and show positive relation with long term debt. Gray et al. (2013), Wang and Esquesa (2014), Boubakri and Saffar (2016) and Willemink (2018) findings support this result as they argued in favor of positive relation that in individualistic societies there will be more agency problem because managers and shareholders have conflict of interest and taking the advantage of their position managers will take loans even on higher interest rate. While in emerging countries still societies at collective and individual level think about the benefits of other's connected with them and avoid or at least hesitate to take the benefits at the cost of others interests. So, in emerging countries managers have lower trends toward long term debts.

Societies accepting power distance and inequality in their culture have monocratic style of leadership where there is more acceptance of authority and position by subordinates without any conflict. So, there is minimal or sometime no disclosure of information. Aggarwal & Goodell (2009); Zheng et al.(2012); Wang &Esquesa, 2014; Boubakri&Saffar, 2016; Willemink, 2018 found same results, supporting with trade off theory, agency and bankruptcy theory that lower information causes high transaction cost taking to higher chances of bankruptcy, discouraging the firms to add more debt in their capital structure. In the above table emerging countries have higher mean values of PD as compared to developed countries with negative beta showing consistency with the prior finding that managers in higher PD societies avoid long term debt and prefer equity in their capital structure. Opposite to this, developed countries have lower mean value of PD, have democratic leadership style with open discussion and arguments between management and employees, due to clearer of situation they feel confidence on including debt in their capital.

Societies accepting power distance and inequality in their culture have monocratic style of leadership where there is more acceptance of authority and position by subordinates without any conflict. So, there is minimal or sometime no disclosure of information. Aggarwal & Goodell (2009); Zheng et al.(2012); Wang &Esquesa, 2014; Boubakri&Saffar, 2016; Willemink, 2018 found same results, supporting with trade off theory, agency and bankruptcy theory that lower information causes high transaction cost taking to higher chances of bankruptcy, discouraging the firms to add more debt in their capital structure.

In the above table emerging countries have higher mean values of PD as compare to developed countries with negative beta showing consistency with the prior finding that managers in higher PD societies avoid Long term debt and prefer equity in their capital structure. Developed countries also have 46.35 mean value approaching to middle of PD index so it can be generalized that where there is higher PD, there will be low debt in capital structure.

3.6 Conclusion

This study also explores whether the impact of culture is significantly different Developed vs emerging economies and Asia vs European region. MAS, UNC_AVOI, IND and PD shows negative significant results in emerging countries exploring that if in an emerging country values for MAS, UNC_AVOI, PD is near or above 50 it will affect managers behavior toward leverage, and they show negative

behavior toward acquiring debt in their capital structure. The value of IND is low in emerging countries, it shows that managers in emerging economies care about the interests of others and do not include risk in capital of the firm in term of long-term debt. Further, it reveals about developed economies MAS, Unc_avoi and IND have direct significant effect on non-current liability, while PD and LTO shows negative insignificant relationship with leverage

Reference:

Abor, J. (2007). Corporate governance and financing decisions of Ghanaian listed firms. Corporate Governance: The international journal of business in society, 7(1), 83-92.

Abor, J., & Biekpe, N. (2007). Corporate governance, ownership structure and performance of SMEs in Ghana: implications for financing opportunities. Corporate Governance: The international journal of business in society.

Agrawal, A., & Nagarajan, N. J. (1990). Corporate capital structure, agency costs, and ownership control: The case of all-equity firms. The Journal of Finance, 45(4), 1325-1331.

Aggarwal, R., & Goodell, J. W. (2009). Markets and institutions in financial intermediation: National characteristics as determinants. *Journal of Banking & Finance*, 33(10), 1770-1780.

Ahunov, M., & Van Hove, L. (2020). National culture and financial literacy: international evidence. Applied Economics, 52(21), 2261-2279.

Ali Shah, S. Z., Butt, S. A., & Hassan, A. (2009). Corporate governance and earnings management an empirical evidence form Pakistani listed companies. European Journal of Scientific Research, 26(4), 624-638.

Allini, A., Rakha, S., McMillan, D. G., & Caldarelli, A. (2018). Pecking order and market timing theory in emerging markets: The case of Egyptian firms. Research in international business and finance, 44, 297-308.

Alves, P., Couto, E. B., & Francisco, P. M. (2015). Board of directors' composition and capital structure. Research in International Business and Finance, 35, 1-32.

Antonczyk, R. C., & Salzmann, A. J. (2014). Overconfidence and optimism: The effect of national culture on capital structure. *Research in International Business and Finance*, 31, 132-151.

Arosa, C. M. V., Richie, N., & Schuhmann, P. W. (2014). The impact of culture on market timing in capital structure choices. Research in International Business and Finance, 31, 178-192.

Berger, P. G., Ofek, E., & Yermack, D. L. (1997). Managerial entrenchment and capital structure decisions. The journal of finance, 52(4), 1411-1438.

Breuer, W., & Quinten, B. (2009). Cultural finance. Available at SSRN 1282068.

Boubakri, N., &Saffar, W. (2016). Culture and externally financed firm growth. Journal of Corporate Finance, 41, 502-520.

Bokpin, G. A., & Arko, A. C. (2009). Ownership structure, corporate governance and capital structure decisions of firms. Studies in Economics and Finance.

Chen, J. J. (2004). Determinants of capital structure of Chinese-listed companies. Journal of Business research, 57(12), 1341-1351.

Chen, J., & Strange, R. (2005). The determinants of capital structure: Evidence from Chinese listed companies. Economic change and Restructuring, 38(1), 11-35.

Chakraborty, I. (2010). Capital structure in an emerging stock market: The case of India, Research in *International Business and Finance*, 24, 295-314.

Chaudhuri, K., Sasidharan, S., & Raj, R. S. N. (2020). Gender, small firm ownership, and credit access: Some insights from India. Small Business Economics, 54(4), 1165-1181.

Gaud O., Jani E., Hoesli M. and Bender A. (2005). The capital structure of Swiss firms: An empirical analysis using dynamic panel data, *European Financial Management*, 11, 51-69.

Baker, M., & Wurgler, J. (2002). Market timing and capital structure. The journal of finance, 57(1),1-32.

Baskin, J. (1989). An empirical investigation of the pecking order hypothesis. *Financial management*, 26-35.

Mac an Bhaird, C., & Lucey, B. (2014). Culture's influences: An investigation of inter-country differences in capital structure. Borsa Istanbul Review, 14(1), 1-9.

Butt, S. A., & Hasan, A. (2009). Impact of ownership structure and corporate governance on capital structure of Pakistani listed companies. International Journal of Business & Management, 4(2).

Chui, A. C., Lloyd, A. E., & Kwok, C. C. (2002). The determination of capital structure: is national culture a missing piece to the puzzle?. Journal of international business studies, 33(1), 99-127.

Deesomsak, R., Paudyal, K., & Pescetto, G. (2004). The determinants of capital structure: evidence from the Asia Pacific region. Journal of multinational financial management, 14(4-5), 387-405.

De Jong, E., & Semenov, R. (2002, June). Cross-country differences in stock market development: A cultural view. In EFA 2002 Berlin Meetings Presented Paper, University of Groningen, Research School'Systems, Organization and Management', Research Report 02E40.

Dimitropoulos, P. E., & Asteriou, D. (2010). The effect of board composition on the informativeness and quality of annual earnings: Empirical evidence from Greece. Research in International Business and Finance, 24(2), 190-205.

Dyer, J. H., & Chu, W. (2003). The role of trustworthiness in reducing transaction costs and improving performance: Empirical evidence from the United States, Japan, and Korea. Organization science, 14(1), 57-68.

Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. The journal of law and Economics, 26(2), 327-349.

Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. The review of financial studies, 15(1), 1-33.

Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. Journal of financial economics, 67(2), 217-248.

Frank, M. Z., & Goyal, V. K. (2009). Capital structure decisions: which factors are reliably important?. Financial management, 38(1), 1-37.

Frank, M. Z., Goyal, V. K., & Shen, T. (2020). The Pecking Order Theory of Capital Structure: Where Do We Stand?. Available at SSRN 3540610.

Gaud, P., Jani, E., Hoesli, M., & Bender, A. (2005). The capital structure of Swiss companies: an empirical analysis using dynamic panel data. European Financial Management, 11(1), 51-69.

Gervais, S. (2009). Behavioral finance: Capital budgeting and other investment decisions. Fuqua School of Business Duke University, 3.

Griffin, D., Li, K., Yue, H., & Zhao, L. (2009). Cultural values and corporate risk-taking. University of British Columbia and Peking University Working Paper.

Gleason, K. C., Mathur, L. K., & Mathur, I. (2000). The interrelationship between culture, capital structure, and performance: evidence from European retailers. Journal of business research, 50(2), 185-191.

Guney, Y., Karpuz, A., & Komba, G. (2020). The effects of board structure on corporate performance: Evidence from East African frontier markets. Research in International Business and Finance, 53, 101222.

Hirshleifer, D., & Thakor, A. V. (1992). Managerial conservatism, project choice, and debt. The Review of Financial Studies, 5(3), 437-470.

Hofstede, G. (1984). Cultural dimensions in management and planning. Asia Pacific journal of management, 1(2), 81-99.

Hofstede, G. (2001). Culture's recent consequences: Using dimension scores in theory and research. International Journal of cross cultural management, 1(1), 11-17.

Hovakimian, A., & Li, G. (2011). In search of conclusive evidence: How to test for adjustment to target capital structure. Journal of Corporate Finance, 17(1), 33-44.

Im, H. J., Kang, Y., & Shon, J. (2020). How does uncertainty influence target capital structure?. Journal of Corporate Finance, 101642.

Khatri, N. (2009). Consequences of power distance orientation in organisations. Vision, 13(1), 1-9.

Khaki, A. R., & Akin, A. (2020). Factors affecting the capital structure: New evidence from GCC countries. *Journal of International Studies*, 13(1).

Masulis, R. W., & Zhang, E. J. (2019). How valuable are independent directors? Evidence from external distractions. Journal of Financial Economics, 132(3), 226-256.

Nadler, C., & Breuer, W. (2019). Cultural Finance as a research field: an evaluative survey. Journal of Business Economics, 89(2), 191-220.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. The American economic review, 76(2), 323-329.

Jensen, M. C., & Meckling, W. H. (1976). eory of the firm: Managerial behavior, agency costs and ownership structure. Journal of financial economics, 3(4), 305-360.

Jurkus, A. F., Park, J. C., & Woodard, L. S. (2011). Women in top management and agency costs. Journal of Business Research, 64(2), 180-186.

Karadeniz, E., Kandir, S. Y., Balcilar, M., & Onal, Y. B. (2009). Determinants of capital structure: evidence from Turkish lodging companies. International Journal of Contemporary Hospitality Management.

Kim, H., & Berger, P. D. (2008). A comparison of capital structure determinants: The United States and the Republic of Korea. Multinational Business Review, 16(1), 70-100.

Kurshev, A., & Strebulaev, I. A. (2015). Firm size and capital structure. Quarterly Journal of Finance, 5(03), 1550008.

Kwok, C. C., & Tadesse, S. (2006). National culture and financial systems. Journal of International business studies, 37(2), 227-247.

Lia, K., Griffina, D., Yueb, H., & Zhaob, L. (2013). How does culture influence corporate risk-taking?. Journal of financial economics, 23, 1-22

Li, L., & Islam, S. Z. (2019). Firm and industry specific determinants of capital structure: Evidence from the Australian market. International Review of Economics & Finance, 59, 425-437.

Mehran, H. (1992). Executive incentive plans, corporate control, and capital structure. Journal of Financial and Quantitative analysis, 539-560.

Mirza, H. H., Andleeb, S., & Ramzan, F. (2012). Gender diversity and firm performance: Evidence from Pakistan. Journal of Social and development Sciences, 3(5), 161-166

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. The American economic review, 48(3), 261-297.

Moradi, A., & Paulet, E. (2019). The firm-specific determinants of capital structure–An empirical analysis of firms before and during the Euro Crisis. Research in International Business and Finance, 47, 150-161.

Myers, S. C. (1977). Determinants of corporate borrowing. Journal of financial economics, 5(2), 147-175.

Myers, S. C. (1984). The capital structure puzzle. THE JOURNAL OF FINANCE, 39(3), 574-592.

Nguyen, T., Bai, M., Hou, Y., & Vu, M. C. (2020). Corporate governance and dynamics capital structure:, evidence from Vietnam. Global Finance Journal, 100554.

Oktavina, M., Manalu, S., & Yuniarti, S. (2018). Pecking order and trade-off theory in capital structure analysis of family firms in Indonesia. Jurnal Keuangan dan Perbankan, 22(1), 73-82.

Ozkan, A. (2001). Determinants of capital structure and adjustment to long run target: evidence from UK company panel data. Journal of business finance & accounting, 28(1-2), 175-198.

Palacín-Sánchez, M. J., Ramírez-Herrera, L. M., & Di Pietro, F. (2013). Capital structure of SMEs in Spanish regions. Small Business Economics, 41(2), 503-519.

Pham, H. S. T., & Nguyen, D. T. (2019). The effects of corporate governance mechanisms on the financial leverage-profitability relation. Management Research Review.

Purag, M. B., Abdullah, A. B., & Bujang, I. (2016). Corporate governance and capital structure of Malaysian family-owned companies. Journal of Business and Retail Management Research, 11(1).

Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. The journal of Finance, 50(5), 1421-1460.

Rose, C. (2007). Does female board representation influence firm performance? The Danish evidence. Corporate Governance: An International Review, 15(2), 404-413.

Sibilkov, V. (2009). Asset liquidity and capital structure. Journal of Financial and Quantitative Analysis, 44(5), 1173-1196

Retrieved from Sekely, W. S., & Collins, J. M. (1988). Cultural influences on international capital structure. Journal of International Business Studies, 87-100.

Sheikh, N. A., & Wang, Z. (2011). Determinants of capital structure. Managerial Finance.

Sheikh, N. A., & Wang, Z. (2012). Effects of corporate governance on capital structure: empirical evidence from Pakistan. Corporate Governance: The international journal of business in society.

Sheikh, N. A. (2015). Capital Structure Determinants of Non Financial Listed Firms in Service Sector: Evidence from Pakistan. Pakistan Journal of Social Sciences (PJSS), 35(2).

Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. The Journal of finance, 43(1), 1-19.

Wang, D., & Esqueda, O. A. (2014). National cultural effects on leverage decisions: Evidence from emerging-market ADRs. Research in International Business and Finance, 31, 152-177.

Warner, J. (1977). Bankruptcy Costs: Some Evidence. The Journal of Finance, 32(2), 337-347.

Willemink, T. D. (2018). Cultural Dimensions Influencing The Capital Structure: A Study On The G7 (Bachelor's thesis, University of Twente).

Williamson, O. E. (1988). Corporate finance and corporate governance. The journal of finance, 43(3), 567-591.

Yates, J. F., & de Oliveira, S. (2016). Culture and decision making. Organizational Behavior and Human Decision Processes, 136, 106-118.

Zingales, L. (2015). The "cultural revolution" in finance. Journal of Financial Economics, 117(1), 1-4. doi:http://dx.doi.org/10.1016/j.jfineco.2015.05.006

Zheng, X., El Ghoul, S., Guedhami, O., & Kwok, C. C. (2012). National culture and corporate debt maturity. Journal of Banking & Finance, 36(2), 468-488.