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# Impact of Corporate Governance and Culture on Capital Structure

by

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# Impact of Corporate Governance and Culture on Capital Structure

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*To God, my parents, my beloved family and all  
my well-wishers who always provided  
unconditional love, endless support and  
encouragement*



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## *List of Publications*

It is certified that following publication(s) have been made out of the research work that has been carried out for this thesis:-

1. Andleeb, S., Hassan, A. & Ahmad, S. (2021). Effect of Culture on Capital Structure of Developed and Emerging Countries. *Indian Journal of Economics and Business*, 20(4), 235-260.
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## *Abstract*

Academic curiosity about cultural influences on financial decision-making has grown in the last decade leading to a significant literature contribution in this field. But still there are persistent differences and variations regarding choice of debt. As determination of capital structure still have some missing piece to the puzzle. This study explores “Is National Culture a missing piece to the puzzle”? So, the basic drive of this study is to discover that how debt choice is influenced by country specific factors in presence of company and governance determinants.

To investigate this feature sample has been collected from developed and emerging countries from the region of Asia, Europe, Middle east, Africa and North America. This study examines the impact of culture and governance variables, along with firm specific determinants as control variables on capital structure of the firm for the period 2006 to 2016 in respect of overall sample from 15 countries. There is unbalanced data of 750 firms. A significant outcome of cultural dimensions of Hofstede Power distance (PD), Individualism (IND), Uncertainty avoidance (UNCA), Masculinity (MAS), Long-term orientation (LTO) and Indulgence have been observed on capital structure in the presence of company specific factors i.e., liquidity, profitability, tangibility, growth and firm size along with corporate governance variables such as board size, CEO duality, number of female directors, presence of foreign and independent directors. Current capital structure theories, in specific the agency theory and the pecking theory show more relation to national culture. GMM and EGLS models have been used to test the impact of country specific attributes on debt ratios in presence of firm specific and governance related determinants. Comparison of outcomes suggest that in all classifications of data where the Mean value of Masculinity is lower than 50, positive relation with long term debt is observed. In complete data set, even after incorporating more governance variables in 2nd classification it remains positive, also Masculinity is directly related to leverage in Developed nations and in European countries, but it shows inverse findings for Asian and Emerging economies where there means value of Masculinity is above 50.

Uncertainty Avoidance depicts direct relation with leverage in all sets of samples, all variables of governance and in developing countries but its relation is inverse in emerging countries, in Asia and in Europe. Individualism has significant positive relation with leverage in almost every category of the current study except Europe where its results are insignificant. Power Distance have significant negative relation with leverage in complete sets of study except in case where more governance variables are incorporated in the regression it becomes insignificant. Long Term Orientation also depicts positive significant relation with leverage in all countries data set, also in Asia and Europe but on same mean value if more governance variables are included its relation becomes inverse with long term Debt. For Sixth newly added dimension of Hofstede 'Indulgence' limited data is available so it shows mix findings. In overall sample even after including more governance variables its relation is positive with debt but in case of Asia and Europe it depicts positive relation. Firm specific determinants have also indicated significant impact on leverage for overall sample and other classification under study. Due to limitation of corporate governance data some countries have been excluded in subgrouping of geographical and economic analysis. The implication of these results is that culture of the country has role in decision of capital structure.

**Key words: Liquidity, Profitability, Tangibility, Growth, Firm size, Board size, independent directors, Foreign directors, Gender diversity and Hofstede cultural dimensions.**

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# Abbreviations

<b>BSZ</b>	Board size
<b>CEO</b>	chief executive officer
<b>CG</b>	corporate governance
<b>COB</b>	Chairman of the Board
<b>FCFT</b>	free cash flow theory
<b>GROW</b>	Growth
<b>IFRS</b>	International Financial Reporting Standards
<b>IND</b>	Individualism
<b>INDLG</b>	Indulgence
<b>IVR</b>	Indulgence vs Restraint
<b>LTO</b>	Long-term Orientation
<b>MAS</b>	Masculinity
<b>PD</b>	Power Distance
<b>POT</b>	pecking order theory
<b>PROF</b>	Profitability
<b>ROA</b>	Return on Assets
<b>ROCE</b>	Return on Capital employed
<b>ROE</b>	Return on equity
<b>SIZE</b>	Firm Size
<b>TANG</b>	Tangibility
<b>UNC AVOI</b>	Uncertainty Avoidance
<b>WACC</b>	weighted average cost of capital

# Chapter 1

## Introduction

### 1.1 Background of the Study

In the corporate world “capital is the lifeblood of growing business” (Gaud et al., 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. Hence capital structure of any firm can be defined as “the way, by which a firm finances its assets through equity, debt, or hybrid securities” (Brusov et al., 2015; Moradi and Paulet, 2019; Alfawareh et al., 2021; Ferris et al., 2018). Typically companies finance from two sources i.e. debt or equity. Debt means acquiring long term loan from external sources such as from financial institutions, monetary firms, suppliers, retailer or from common people in form of debentures. Equity is the investment made by shareholders for receiving partial ownership.

Acquiring investment to accomplish their aims, firm’s prefer debt in case firm is not “operating in red” because debt will provide tax shield to the profit which increases

shareholders wealth. In addition to this advantage higher leverage in financial statements will create problem of distress and solvency for the management, so directors hesitate to take extra risk over the edge. It is essential for directors to determine how much risk they are willing to take, a decision that is determined by their appetite for risk-taking. This decision of managers depends on lot of financial and non-financials factors. 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.

Various financial factors effect on firm's capital formation [Mittal and Kumari \(2015\)](#); [Dang et al. \(2019\)](#) and firm attempt to determine where is its optimal level or the best mix of financing. Research conducted by different academician and practitioners such as [Ramli et al. \(2019\)](#); [Dang et al. \(2019\)](#); [Al-Hunnayan \(2020\)](#); [Jaworski and Czerwonka \(2021\)](#); [Amin et al. \(2022\)](#) 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.

Some firms depict higher tendency toward gearing and vice versa with similar financial indicators, although the major objective of all firms is higher return. Despite common goal if firms 'choice of capital varies it shows that just firms' financial indicators are not decision makers rather the management involved in decision making process affect strongly in choice of debt or equity. Financial theories including agency and signaling also 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 values [Feng et al. \(2020\)](#) because it is the culture of any organization which defines the 'right' behavior in an uncertain situation for problems having alternative measures.

Decision makers such as directors, CEO and managers decisions are also based on their intuition, values, beliefs, education and experience, all above features are related with the culture so indirectly personal traits of managers show impact on decision of managers. Scholars proved that choices of corporate finance have

relation with cultural and behavioral finance. As behavioral finance says that humans are irrational and their decision vary in identical situation due to norms and values of their culture. Ruback et al. (2007) identified two distinguished paths of behavioral corporate finance. First one explores that how the rational managers react to less rational stockholders. Secondly, they explore the idea that how managers can be subject to behavioral biases. Moreover, some scholars find out that behavioral biases also have influence on CEO's decision-making process. If executives and business leader within one company are influenced by behavioral bias while make critical decision, ultimately it will affect capital structure of the company. Various scholars are reviewing behavioral finance on developed and emerging economies and exploring the impact of cultural difference on behavioral bias.

To measure the effectiveness of the governance of a firm, multiple determinants have been studied by scholars such as ownership concentration, audit quality, institutional ownership, family ownership, board size, representation of females in board room, foreign directors, board independence and CEO duality etc. The purpose of using different proxies of governance is to review the decision-making process of board of directors. Scholars even debating over the fact that firms showing resemblance on governance factors behave differently at time of making financial decision.

This trigger the question that in presence of identical financial (firm specific) and nonfinancial factors (corporate governance) why firms do not have comparable financial decision or same level of gearing?

To get the answer of this question corporate governance definition is very important which says that "a solid, transparent corporate governance takes a company toward ethical decision-making process that assist all its participants, permitting the corporation to place itself as an attractive option to stakeholders". Here the important thing is "ethical decision-making process" and these ethics are different for different nations, cultures, and societies. Researchers claim that as firms are governed by the separate governance body, called directors, who are responsible for all decisions related to management and being human it's not possible to give similar judgments and take identical decisions in alike situation because humans

cannot overcome the influence of their culture. [Sekely and Collins \(1988\)](#); [Gray et al. \(2013\)](#); [Breuer and Nadler \(2015a\)](#); [Shahin et al. \(2021\)](#); [Panosso et al. \(2022\)](#) 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 these 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, number 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 et al., 2013](#); [Alabdullah et al., 2018](#); [Naseem et al., 2017](#); [Ullah et al., 2022](#); [Feng et al., 2020](#); [Zaid et al., 2020](#)). In corporate world, governance board is responsible for taking decision so according to behavioral finance theories decision taken by board members will be influenced by the norms and values of the culture they belong [Dowling \(2012\)](#) and this culture varies from country to country. Normative theory suggests about the decision-making process that it comes from the norms and values of the decision maker. So, it can be concluded that ‘National culture’ is playing pivotal role in shaping the culture of the corporations where they operate ([Lindholm, 1999](#)). As per [Hofstede \(2001\)](#), culture of one country is different from the other in a way that it’s not only varying with respect to religion, language, and other facets but also in terms of beliefs, values and acts of the people.

Corporate culture can be defined as how managers and workers will behave in an organization. Assessments of managers are built on the bases of culture from which they have their place ([Griffin et al., 2009](#); [Chandrasena, 2019](#); [Shahin et al., 2021](#)). [Li et al. \(2013a\)](#) found that culture of the country impacts on its formal institutions and executive decision eventually influencing the risk-taking aptitude of the corporate directors.

In today's globalized economy, international organizations 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

organizations are not only functioning in multiple countries rather in unrelated cultures. So, in these globalized corporations' cultural sensitivity is essential. For the success of these multinational corporations one key factor is knowing about the culture of their corporate people as these individuals are involved in decision making process and their national culture can affect decisional power of the managers. So, culture has crucial role in a dynamic environment at corporate level [Lindholm \(1999\)](#) as national culture and organizational values become coterminous when firms are operating across the border. Earlier studies also documented that various corporate decisions are supported by culture. This relation is emphasized by [Li et al. \(2013a\)](#) and [Mogha and Williams \(2021\)](#) 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.

The purpose of this study is to understand that how culture of a country can affects 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 and Jacob \(2010\)](#); [Li et al. \(2013a\)](#); [Aftab et al. \(2018\)](#); [Chandrasena \(2019\)](#); [Shahin et al. \(2021\)](#); [Panosso et al. \(2022\)](#) who are of the view that corporate decision making is affected by national culture. To understand all aspects of this topic capital structure, firm specific variables, governance, and culture is elaborated in the following sections.

## 1.2 Capital Structure

Capital structure is the combination of different financing options to acquire the assets of the firm. To finance their assets, organisations can make choices between debt and equity. [Frank and Goyal \(2003\)](#) recommended three sources of finance which are available to corporations: retained earnings, debt, and equity. [Rozali et al. \(2006\)](#) categories the sources of finance into self-financing, the government arrangements, short-term and medium-term loans from banks, long-term loans and financing from financial institutions other than banks. [Irwin and Scott \(2010\)](#) organize sources of finance into personal savings, personal and business

bank loans, private and business credit cards, redundancy, mortgage, family and friends, leasing, hire purchases, microfinance, grants, and others.

As in the statement of financial position capital is divided in two groups, internal finance in terms of retained earnings, external finance can be acquired through two ways, loan and equity. Internal finance or retained earnings will be available to the mature and stable firms which have profits from previous year, this is the amount retained after distributing dividend to the shareholders; if firms have some plans for growth, then management retains a large portion of profit for the year as per the requirement of investment and distributes relatively smaller amount among shareholders as dividend. In case of raising funds through equity or shares firms have no obligation to pay back this investment to the investor with any periodic or monthly cost as interest so companies may prefer issuance of shares as a source of finance whenever investment is required. On the other hand, issuing shares will dilute the ownership of the shareholders which can create problems for the existing stockholder who may be concerned about the value of equity they hold or ratio of their ownership. Sometimes by issuing shares major shareholders can enjoy the power and acquire the control of firm by appointing directors of their own choice, by this way the minority equity holders will be disappointed since they may not be able to practice their part in the matters of firm and consequently lead to them taking decision of leaving the company by selling of their shares.

To avoid certain problems associated with issuance of shares, as a source of finance, such as: dilution of ownership and conflicts regarding the governance and control over the matters of firm and for the purpose of reaping benefits of tax shield, companies with higher value of non-current assets prefer to raise funds through debt. A firm can avail debt financing via multiple facets such as bank loan, bonds, note payable or debenture. Firms pay a fixed amount of interest on these long-term debts and enjoy the tax shield, sparing more profit for equity holders. In addition, firms can also raise funds by issuing hybrid securities (containing features of both debt and equity) such as preferred shares and convertible bonds.

Conclusively the capital structure of a firm is a rational and optimal mixture of debt, equity, and retained earnings that contributes to the achievement of the firm's goal in an efficient manner. However, the choice of financing between debt



or equity depends on lot of factors which may be considered as company specific, governance related or country specific determinants.

## 1.3 Company Specific Factors

Companies with a target-oriented approach consider the procurement of finance via the most secure source as one of their most prioritized concern. To decide between debt and equity financing, many factors are required to be kept under consideration such as long-term objectives of the business, existing interest rates in economy, borrowing requirements, repayment schedule, access to equity market and current business position. Before making any choice, firms mostly analyse their internal financial dynamics which shows company's performance and help in making decisions of finance regarding debt and equity financing. Finance scholars found several factors which may affect the decision about choice of capital. These determinants are called company specific factors such as return on assets (ROA), return on equity (ROE), Tangibility, Size of business, growth of business, liquidity, Profitability. Non-debt tax shield etc.

### 1.3.1 Liquidity

Liquidity means the ability of a firm to pay its short-term obligations. The higher the liquidity, the better is the safety of a firm from insolvency. It also indicates the excess amount of cash held by a firm which may be used for different purposes in the business. Prior studies found that companies with higher liquidity and unsecured debts show a lesser trend toward leverage while at time of choosing capital they usually prefer equity financing. There are different types of liquidity ratios such as:

- Current Ratio
- Quick Ratio usually known as Acid Test Ratio
- Cash Asset Ratio or Absolute Liquidity Ratio
- Net Working Capital Ratio

For this study current ratio is used as parameter of liquidity.it can be calculated as.

$$\text{Current ratio} = \text{current assets} / \text{Current Liability}$$

### 1.3.2 Tangibility

Tangible assets of a company include physical and measurable assets that are used in a firm's operations to generate revenue. Noncurrent assets of firms like land, building, plant and equipment, motor vehicles etc. are called tangible assets. These assets are not only used in operations of the firm to generate revenue but have a more considerable role to play in the firm's financial life as it will be used collateral for loans in case of acquiring finance from financial institutions. Theoretical evidence also supports the fact that higher the level of non-current assets a company holds, particularly land and building, the better the firm's confidence to use them while making finance arrangement, it also leads to a better position of gaining tax shield.

### 1.3.3 Size of Firm

Size of firm means the scale or volume of output by a single business. Firm size has more importance in the life of a business as it affects the output, efficiency, and profitability of the firm. Generally large size corporations are more profitable, having more chances of growth so this efficiency and profitability due to larger size provide cushion to firms for absorbing risk related with investment.

To measure the firm Size different proxies such as total assets of the firm, sale value or market capitalization, net assets, volume of output, value of output or capital invested etc., are used. Theories show that any proxy of firm size relates positively with leverage because to avoid the dilution of ownership and distribution of profit, these large size profitable firms prefer risky investment. So, companies with more assets, higher sales value and larger market capitalization have more room to absorb risk related to leverage. These companies also prefer debt over equity to take the advantages of a tax shield.

### 1.3.4 Growth

In a business life cycle, growth is a stage of stability, expansion, and improvement in different procedures of a firm's success. It can be measured by increase in sale, market share, revenue, demand, market expansion, investment etc. In the process of making financial decisions, analyst use different growth ratios to measure the improvement of business, such as, sales to growth ratio, price earnings ratio, return on equity, price to book ratio, net income percentage, PEG (price earning to growth ratio) etc. All these ratios are used to calculate the expected growth in future, higher ratio means more firm's potential for growth, which leads to higher profitability and more trust of investors, so these companies take the advantage of investor trust and make a choice of leverage whenever funds are required for financing.

### 1.3.5 Profitability

Profitability indicates the ability of a firm to generate profit from its investment i.e., profit from its capital employed. As capital employed can be calculated by adding equity and non-current liabilities, which is equal to total investment made by the firm. Higher profitability indicates efficient utilization of resources. Firms measure their profitability through different ratios such as gross profit margin, net profit margin, ROE, ROCE, ROA, cash flows etc. Pecking order theory by [Myers and Majluf \(1984\)](#) organizes various forms of financing in a hierarchy in terms of priority that should be given by firms while deciding which one to use first and then later. According to this theory, profitable firms arrange relatively lower amounts of funds through leverage as pecking order theory gives priority to the use of internal funds or retained earnings which indicates a negative relation between profitability and leverage.

At the same time financial institutions are more willing to lend loans to these profitable firms because of their less chances of bankruptcy. At lower interest rates, these profitable firms can avail funds and can also enjoy the advantage of tax shield which leads again to higher profitability and increased wealth of shareholders. If firms, follow the trade-off theory then they will take advantage

of these lower cost funds and use these long-term interest bearing liabilities to reduce the cost of capital and to increase the profitability and equity holder's wealth. For current study ROA is used as profitability measure. It explains the extent to which a company earns profit proportional to its total assets. ROA gives an idea to managers, investors, and analysts that how efficiently a company's management is using their economic resources or balance sheet assets to generate profit. ROA is presented as a percentage of profit to its total assets. Higher ratio means management is using its assets efficiently so according to financial theories the company with higher ratio of ROA can borrow more from the financial market.

## 1.4 Corporate Governance

The system of managing the organization through some defined rules and policies by directors who are elected by shareholders to maximize their wealth is called corporate governance. The members comprising the board of directors have a pivotal role to play in corporate governance of any firm, which is essentially reflected in the sound establishment of relationship between stockholders and other stakeholders such as suppliers, lenders, investors, government, customers etc. They delegate responsibilities of operation to CEO's who are elected by these board of directors.

A somewhat confined definition of corporate governance given by [Shleifer and Vishny \(1997\)](#) was: "corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment." A good and efficiently working corporate governance built the trust of investor to maximize return on their investment. This efficiency of CG depends on different characteristics of board, at both levels, in quantity and qualities. The main feature of board includes board size, board independence, ownership of directors, foreign directors, dual position of director as CEO, education of members, female representation on board, executive and non-executive board members, board meetings etc. These all-factors affect on the decision of a board while taking any long-term decisions such as issuance of debt or equity in a firm. For the purpose of current study governance factors such as board size, dual position of director

as CEO, dual position of CEO as chairman, female representation, independent directors and presence of foreign directors have been taken into consideration as these factors are directly affected by the culture of their country.

In 21st century corporate governance cannot be studied in an identical situation as said by Tricker and Li (2017) that governance of corporations works under the effect of culture of that country. According to their view corporate governance within the boundaries of a nation is stable certainly with the culture of the nation. Therefore, culture has central point to understanding of corporate governance. Firms with larger board size shows more diversity of culture in their opinion, views, practices and decisions. Agency theory says dual position of CEO empower him too much weakening the position of other board, but this statement is incomplete without observing the cultural traits of the CEO, who obviously work under the culture from which he belongs. Another determinant of CG is gender diversity in board which is affected by the Hofstede's cultural dimension 'Masculinity' and to analyze about female's role in the organization that either it is just written in black and white or in real they are playing their role depends on the autonomy given to the women from culture of their country. So female representation in board is an important determinant of this study. Independent directors' responsible behavior depicts the culture of their origin and same for foreign directors. So, the reason for selection of CG variables under study is their relation with culture. These determinants measured values are available in financial reports of very few countries which is limitation of the study, so subgroups of countries depend on the available data of governance.

#### **1.4.1 Board Size**

There is no optimal number of board members, after considering different geographical and economic factors firms take decision about the number of their board members. Board with three to four members will be considered smaller while [Lipton and Lorsch \(1992\)](#); [Jensen \(1993\)](#) was at the opinion of seven to nine board members in normal while optimal number should be eight. Increasing number means more specialization and more diversity leading to efficiency ([Malik et al., 2014](#)). Firms with more multiple business lines and complex management

hierarchy make choice of larger board as compared to smaller and simple firms (Wang et al., 2013). But it's not a rule of thumb as Guest (2009) worked on UK related firms and found no significant relation between larger firms and larger board size, rather he found that it may lead to poor communication.

### **1.4.2 Dual Position of Director as CEO**

To manage the operations of the business board of directors appoint a Chief Executive officer whose role is to make planning and motivate the managers and workers to remain focused for achieving the goals of business. Directors some time choose a person from their board members to work as CEO. This can also increase agency problem for firm.

### **1.4.3 Dual Position of CEO as Chairman**

CEO duality is a position in which the Chairman of the Board (COB) perform the role of a Chief Executive Officer (CEO) at the same time. This dual role can be the requirement of the business. Chief Executive Officer (CEO) duality requires an individual to be able to carry out the role as Chairman of the Board (COB) and Chief Executive Officer (CEO) simultaneously to control the company. The roles of both positions are different but, in the CEO, CHAIR duality; the individual is required to perform these roles instantaneously. Numerous roles as a COB are to ensure successful operation of the Board, to assist and advice the CEO in the development and execution of the strategy with some more roles. On the other hand, CEO is required to develop strategies for the Board and ensure that agreed strategies are mirrored in the business.

### **1.4.4 Female Representation**

Female representation means that how many female members are present in the governance board as for better performance of the board there should be a reasonable representation of both genders man and women. At top position in the corporate word, female ratio should be in a justified proportion. Narrowing the

focus to management of the corporate organization, the female segment is very small in top management around the globe, as it is a common belief that women lack decision power, are emotional, less rational and therefore do not have strategic mind and vision needed for survival in the corporate world (Mirza et al., 2012). In 21st century trends in top management are changing and now some countries specified a minimum ratio of females at top such as Norway have 40 percent presence of females ,U.K targets to 25%, South Africa near to 20% , lowest to South Korea's 2.3%. But in some countries due to absence of regulations there is no gender diversified board or have minute representation of females. This is the case in the United States, Japan, Russia, China, Greece, Pakistan, South Korea etc. Scholars found that as board size create agency problem, to resolve the agency issue firms appoint diversified board, so that director's performance will improve in this diversified board (Terjesen et al., 2016). "Myths and Facts about Female Directors," by Renée B. Adams discussed the fact that with variation in experience, approach of thinking and attitude, diverse top management or board of directors can get improved outcomes.

#### 1.4.5 Board Independence

As board size will increases, agency problems will also increase affecting the performance of the board and indirectly the performance of the firm (Lin and Fu, 2017; Mishra and Kapil, 2017; Shin-Ping and Tsung-Hsien, 2009). To overcome this issue firm's hire independent directors. Independent or non-executive directors are working in the best interest of shareholders as they are not involved in management and do not have any material interest in the business which can affect their true and fair judgment other than their rumination. This works to minimize the agency problems and improve the performance of the firm (Tulung and Ramdani, 2018).

Board independence will perform better only when the outside members do not have any relation with principle and agent otherwise the interest of minority shareholders will not be secure. Kao et al. (2019) found that if there will be a higher proportion of independent directors, firm will prefer smaller board size which will reduce the agency cost.

### 1.4.6 Foreign Directors

As firms grow across the border it copes with complexity, to improve the efficiency of boardroom and to be diversified geographically and demographically these firms appoint foreign directors, who can improve the firm value through advisory and supervisory role (Miletkov et al., 2017). As these foreign directors belongs from different culture, having different governance standards, independent laws of country of origin, so they may have a diversified strategic and operational experience which can improve the efficiency of boardroom. They will also be helpful in case of merger and acquisition as they have knowledge and experience in the relevant market. So, benefit related with the foreign directors are more than its cost with one problem, as their presence in board meetings will be less as compare to the other native board members, Hahn and Lasfer (2016) explored in U.K based firms, that presence of more proportion of foreign director correlate to lower meeting which leads to lower monitoring and control over the governance leading to agency problems.

## 1.5 National Culture

After considering the relation between capital structure with company specific factors and governance variables manager cannot simply take decision based on traditional finance theory, results vary across the world with same variables, which show the presence of some hidden variables to come an optimal mix of finance. As normative theory suggests about the decision-making process that it comes from the norms and values of the decision maker. In corporate world, governance board is responsible for taking decision so according to behavioral finance theories decision taken by board members will be influenced by the norms and values of the culture they belong Dowling (2012). Culture have a significant role in the life of individuals (Trommsdorff, 2016).

Consciously or unconsciously individual's decisions are based on culture because it is a learned behavior of group of people which is grounded on shared values, awareness, practice, beliefs, approaches, meanings, faith, roles, spatial relations, concepts of the world, material objects and possessions acquired by a group of



people in the course of generations through individual and group striving. In simple words it is an acceptable behavior of people in a particular society. To understand the importance of culture, study of the history is important. According to Hofstede, changes in cultural framework come from multiple sources, the main source of change is may be atmosphere, surroundings or open-air through which uncontrolled natural forces (changes of climate and spread of diseases) affect the values of a country or region. Social forces such as trade, revolution, organizational and economic domination, scientific discoveries, hi-tech breakthrough and so forth [Primecz et al. \(2011\)](#) also have affect on the culture of that region.

External influence is intentionally directed towards the origins and not at the societal norms themselves. According to Hofstede, customs rarely change through direct adoption of outside values. Instead, changes occur through shifts in ecological conditions, hi-tech, economic and hygienic environment. In general, swings in norms, customs and value comes gradually unless and until the external powers are particularly forceful (such as in the case of military conquest or deportation).

Culture is not only important in an individual's life but also have its importance in the corporate world. Decision about finance and investment are also affected by the culture of the nation or country of origin of any organization ([Li et al., 2013a](#)). Corporate culture can be defined as how managers and workers will behave in an organization. Assessments of managers are built on the culture from which they have their place ([Griffin et al., 2009](#)).

[Zingales \(2011\)](#) says that in past all those things which remained unexplained were imposed on culture and near about 160 definitions were there [Steinmetz \(1999\)](#), then cultural revolution come in economics and the assumption of "homo economicus" failed because human decisions are not rational and show deviation. This was explained in behavioral finance [Ricciardi and Simon \(2000\)](#) and this deviation was related with belief and values ([Guiso et al., 2006](#)).

[Hofstede \(2001\)](#), work is familiar and best-known for study of culture in social sciences, according to him culture can be classified in six dimensions: Masculinity vs. femininity, Power distance, Uncertainty avoidance, individualism vs. collectivism, long term vs. short term orientation and indulgence vs. restraint.

### 1.5.1 Masculinity (MAS)

Masculine cultures display unlike directions for men and women as compared to feminine cultures. In Hofstede masculine culture, male is dominant, more powerful with strong leadership qualities, responsible for taking all kind of decisions followed by female members, more assertive, independent and risk taker. Role of female in this masculine culture is clearly defined that their main duty is to nurture the family, modest, risk averse and follow the rules set by the society. Contradictory to this in feminine culture quality of life have importance as compared to money, decision is taken by mutual discussion of men and women, in workplace both have equal rights, higher ratio of women is working in top management, male members do not hesitate to work as female subordinates.

According to Hofstede culture index nations like Japan, Italy, Switzerland, China, UK, South Africa, US, Germany shows 60 above score for this specific dimension, Japan at highest of Masculinity with score of 95. This country's list include mostly developed nations as compare the feminist societies of Norway, Finland, Thailand, Spain, France, Turkey, Taiwan, Indonesia, Malaysia, Pakistan etc. having score less than 50. Norway have the lowest value of points ( 8) in this list ,where 40% of women presence in board of governance is assured by the law of order.

### 1.5.2 Uncertainty Avoidance (UNC AVOI)

Uncertainty avoidance means few societies' shows risk averse behavior, and some are risk takers, culture of risk-taking depicts people of that society senses easiness in working with unpredicted circumstances and they have ability to cope unspecified conditions and can change their strategy in dynamic environment. Societies with higher scores are working on some set rules or planned policies, they avoid unpredictable circumstances having proper step by step planning for their decisions, they strictly follow these plans and if they feel any uncertain situation, they try to avoid it. These people do not like risky investments also. Countries with high uncertainty avoidance (Japan, Italy, Belgium, France, Spain, turkey, Argentina, Greece) shows strong base for Uncertainty Avoidance culture, as they score 75 and above, highest score of Greece i.e., 112, they give high priority to customs,

practices and procedures in organizations and in social norms in general.

Countries with low uncertainty avoidance index (UK, US, India, Malaysia, Indonesia, South Africa, Sweden, Singapore), Singapore with lowest value i.e., 08, show more emphasis on flexibility and informality rather than bureaucracy. In view of this cultural dimension, culture of the country can predict about the risk seeking or avoiding behavior of governance board. Their decision about capital choice, i.e., debt or equity can be affected by the culture from where they belong. [Chui et al. \(2002\)](#) argued that Schwartz conservatism and Hofstede's Uncertainty Avoidance measures same thing, which is risk taking ability, country's manager with high values of these dimensions are risk averse so they avoid the risk related with debt lowering leverage ratio and increasingly issuance of equity in capital structure.

### 1.5.3 Power Distance (PD)

The degree to which individuals of a society accepts discrimination in their environments is defines as power distance. Inequality sustains in every society either high or low depends on the culture of the society, senior members get respect in following their decisions from juniors irrespective of the competence they have ([Khatri, 2009](#)). It was difficult to measure that how much power distance prevails in the society, for this Hofstede took the countries included in IBM these countries have been given some points between 0 to 100 on an index, IDV considering high to low power distance among the societies. Countries like Malaysia, Indonesia, China, India, Saudi- Arabia UAE are included in the list of more power distance counties, as they are having scores above 75 to 105, highest in Malaysia with score of 104.

Countries like Sweden, Norway, Japan, Italy, France, US, Australia and Pakistan have value less than 50 showing a lesser amount of inequality in theses cultures, giving power to all in describing their views and have freedom in their actions. Specifically taking the corporate sector where decisions are in the hands of few people at the top management, autocratic style is followed. [Zollo and Ringov \(2007\)](#) found from their research that corporations with high power distance show negative relation with the performance of the firm. [Gleason et al. \(2000\)](#) argues

that managers in the countries with high values Power distance index are autocratic as these societies have autonomy so managers will prefer to issue equity over debt to avoid risk.

#### 1.5.4 Individualism (IND)

Individualism can be defined as degree to which people favor their own interest above others and they are formally independent from others wellbeing, like uniqueness, self-sufficient and autonomous in decision making, they are overconfident about their information that they have ability to control the situation with the data they have , [Yates and de Oliveira \(2016\)](#) while collectivism emphasis on the welfare of society, and give more importance to achieve the collective goals of society. Nations with the culture of collectivism show dependency and generic in their actions. Hofstede's cultural values index show high values of Individualism (IND) for countries like US, Australia, UK, Italy, Canada, Belgium, New Zealand, Norway, Finland etc.it means these societies prefer their interest above the other's. While countries like Pakistan, Indonesia, Malaysia, Thailand, Turkey, Japan, India etc. show lower scores showing higher tendency of collectivism. Specifically relating it with corporate sector and capital structure there should be higher tendency of debt in individualistic cultures because their management will prefer their own interest and will enjoy the benefit of lower cost of capital by using it as a tax-shield associated with leverage. [Chui et al. \(2010\)](#) have studied that native from more individualistic nations show a tendency to be more confident and their overconfidence behavior usually refer to higher debt ratio in capital structure. According to this study individualistic countries like US, Australia, UK, Italy, Belgium, Norway South Africa, and Finland etc. which are mostly developed nations should issue leverage to fulfill the requirement of capital.

#### 1.5.5 Long-term Orientation vs. Short-term Orientation

According to [Hofstede \(2001\)](#), some cultures are future oriented focusing on the targets to be achieved in near and far future, they plan to achieve their goals ignoring the prosaically behavior of helping others specially if they have some

common interests, determined to work hard, no or less leisure time, save money and invest in business plans from where they can get secure returns. In these societies people work hard at present to be awarded in future. Opposing to this, nations with perspective of short term orientation always remain in their past, praise their old achievements, have short term planning as they want quick results, trend of more spending, enjoy leisure time, follow their traditions, avoid risky investments as they prefer to invest in mutual funds. Countries in the list of long-term orientations are China, Taiwan, Japan, Italy, South Korea and Indonesia having value above 60 in LTO index. Pakistan, India, Bangladesh, South Africa, Turkey is short term-oriented countries. Incorporating this cultural dimension in corporate sector corporations in LTO index are more profitable due to firm and consistent planning [Friend and Lang \(1988\)](#), so, they prefer long term investment which is equity [Lievenbrück and Schmid \(2014\)](#), it means long term vs. short term orientation can affect choice of capital in an organization.

### 1.5.6 Indulgence vs. Restraint (INDLG)

The last and comparatively new Hofstede's dimension included in 2010, is indulgence (INDL) which is not as popular as other five cultural dimension. Indulgence (INDLG) reveals the extent to which a society reacts to human basic needs. High values of Indulgence means humans are enjoying the facilities of life such as they have enough money to enjoy food, spend their leisure time happily, have recreations and enjoyment facilities, spend their spare time in sports, in educated people birthrate is high, people have freedom to give their opinion and feedback independently, in short people consider themselves spending a happier life [Hofstede \(2011\)](#); Low values mean societies are not having basic needs of life, more saving and investment in secure funds, no importance of leisure time, less birthrate in educated people, follow strict rules, norms and traditions, people do not have freedom of opinion and no importance of feedback, people in general have no feelings of happiness and they consider themselves helpless.

Countries enjoying the features of indulgence are Australia, Canada, Denmark, Finland, Malaysia, Netherland, South Africa, UK and US. They have score for this dimension above 50. On the other side countries with score less than 50 focusing

on their need, duties and responsibilities are Pakistan, Bangladesh, India, China, Indonesia, France, Italy, Germany, Taiwan, Thailand and Turkey.

[Manos \(2001\)](#) argues that in corporate world most important decisions are related with capital investment and in current studies scholars are concluding that national culture plays important role in determination of capital structure along the previous determinants of governance and firm. To explore this concept current study investigates that how culture of a country impact on its capital decision. Capital structure of any organization tell us about the mix of debt and equity. As financing decisions are directly related with companies polices that either they prefer internal or external source to finance their project, according to literature this preference is not just based on calculated figures or ratio analysis of financial statement rather culture of the origin of the firm has its impact on this decision.

## 1.6 Research Gap and Problem Statement

The prior literature investigates the determinants of capital structure, [Agrawal and Nagarajan \(1990\)](#); [Booth et al. \(2001\)](#); [Charitou and Louca \(2009\)](#); [Chen \(2004\)](#); [Frank and Goyal \(2003\)](#); [Griffin et al. \(2009\)](#); [Breuer and Quinten \(2009\)](#); [Li et al. \(2009\)](#); [Kayo and Kimura \(2011\)](#); [Heng et al. \(2012\)](#) . However, most of the studies has explored only firm or industry-level determinants, while there are few findings determining the impact of corporate governance on financial decisions.

Outcomes of their research about companies' financial decisions shows extreme deviation toward risk taking attitude even with identical financial or governance variables leading toward the emergence of new fields of finance, i.e. behavioral finance and cultural finance. Assessments of governing bodies about firm's financial aspects are useless to debate in absence of behavioral finance theories([Sedliacikova et al., 2021](#); [Buchetti and Santoni, 2022](#)). According to these behavioral biases, actions and attitude of individuals are centered on their cultural values. This is the basic motivation of the current study that how the culture of a country or a region affect the decision-making process of executives especially at time of making financial decisions. Researchers' curiosity about cultural influences on financial judgment has risen. However, the field of Cultural Finance is still very young and

yet unclear research niche with its added value being rather opaque than clearly defined. Prior capital structure theories, specifically the pecking order theory the agency theory and resource dependency theory shows their link to national culture (Blonk, 2018).

Among prior research's only very few consider the role of informal institution such as national culture i.e. (Leung et al., 2005; Chen and Strange, 2005; Bae et al., 2012; Rashid et al., 2020; Shahin et al., 2021; Mogha and Williams, 2021) in financial decision making. These few studies have mostly empirical investigation of the topic and a very few numbers have proven their results with data analysis Chandrasena (2019); Aftab et al. (2018); Begulova and Lace (2019), but those scholars were able to just study the impact of two or three cultural dimensions and unable to cover all six dimensions of Hofstede at once due to any reason or they have just explored culture effect in identical region such as Chandrasena (2019) took data of USA and found that CEO culture effect financial decision making process. This prompts to treat national culture as important determinant of capital structure which have an significant role in explaining differences in the important financial decisions across different counties of the world. This is the main motivation to commence a study to investigates comprehensive, theoretical and empirical analysis through examining the impact of culture and corporate governance along with control variables of firm on important financial decisions of firm i.e., Decision of Capital structure. It will also explore that how Cultural Finance displays a revising function, since already well-studied questions in traditional finance can now be reexamined more precisely in a new cultural light.

Effect of national culture on capital structure is a wider topic which explore that either culture have significant effect or not, to get in-depth knowledge of the topic it's important to observe its effect on regional and economical grounds (Khan et al 2022), which will help the decision makers of firms located in these geographical areas. For this purpose, the study has been done on the bases of Asia and Europe regions and Developed vs emerging economies. As corporate governance data has non availability problem for some CG proxies for selected countries of the sample. As it was a constraint of the study, So, study was conducted under various settings of the governance data.

## 1.7 Research Questions

This study will answer the following research questions:

### Research Question 1

1. Does culture have any effect on the capital structure of the firm?

### Research Question 2

2. Do culture effects differently on capital structure of Asia and Europe/ Developed and Emerging countries?

### Research Question 3

3. How corporate governance influence the capital structure?

### Research Question 4

4. What is the effect of foreign director in choice of capital?

### Research Question 5

5. How company specific factors can be incorporated in capital structure?

To acquire the answer to the research questions, following objectives are formulated:

## 1.8 Research Objectives

Specific research objectives of the study are as follows:

1. To find out that culture have effect on the capital structure of the firm.
2. To explore weather culture effects differently on capital structure of Asia and Europe/ Developed and Emerging countries or not.
3. To investigate the influence of corporate governance on the capital structure of the firm.
4. To examine the effect of foreign director in choice of capital.
5. To observe the influence of company specific factors on capital structure.



## 1.9 Contribution and Significance of the Study

This study is significant in many aspects. This study not only enhances the existing research with addition of national culture as an important determinant of capital structure, including governance and firm specific factors which has been explored in earlier studies but also expand its scope to developed and emerging countries and Asian and European group as well. Most of the earlier research is either theoretical as [Zingales \(2015\)](#); [Nadler and Breuer \(2019\)](#) or include few dimensions of culture on capital structure or not have any model on culture of corporate governance as [Baxamusa and Jalal \(2014\)](#); [Blonk \(2018\)](#), some recent studies shows different results of culture on capital structure in presence of corporate governance [Fauver and McDonald \(2015\)](#). In the current study we find out the effect of culture on capital structure through modeling including all possible measurable and available variables.

In this study all cultural dimensions have been included with data of 15 countries. Major governance variable which can affect the capital structure such as Board size, duality of CEO as Director, Duality of CEO as chairman, Representation of females in boardroom, presence of Independent and Foreign Directors have been included in the study to investigate the impact of governance on capital structure as these directors' decisions are followed by their culture. So, these determinants can play an important role in decision making. This study not only explore the impact of national culture on capital rather it also explains how these cultural dimensions effects in developed and emerging countries. its scope is extended to find the difference in Asia and Europe and answered this question that cultural dimension affects in same way or the other in distinct geographical areas.

## 1.10 Scheme of the Study

This study comprises of five chapters. Section one examines the background, introduction of variables, research questions, objectives, scope and significance of the study. Section two contains theoretical framework, literature review and develop possible hypotheses. Section three covers the Sample, data collection and

methodology. Chapter four is about data analysis and empirical results. Chapter five discusses findings, conclusions and policy recommendations.

# Chapter 2

## Theoretical Background and Literature Review

### 2.1 Theoretical Background

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. Researchers have shown immense attempts in investigating the appropriate combination of debt and equity however so far, no consensus has been developed on the estimated results. This chapter supports the holistic view of existing theoretical and empirical findings and explains the research gaps based on past literature.

#### 2.1.1 Modigliani and Miller's Theory

A theory that is often considered as one of the influential theories of the capital structure of firms is the model by (Modigliani and Miller, 1958). This theory has a market-value approach to explore the determinants of capital structure (Blonk, 2018). According to Modigliani and Miller's , in perfect markets it does not matter which combination of capital a corporation uses to finance its operations (Modigliani and 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

The Trade-Off Theory reports the gap in Irrelevance Theory through merging the impact of the cost i.e., bankruptcy and the benefits i.e., tax shield on leverage in the capital structure of firms. As Modigliani and Miller's irrelevance theory was based on the assumptions of no tax, no cost of capital, no tax and efficient market. But in real corporate world all assumptions are violated as it's not an ideal world. Firms must pay tax, bear cost of capital which give them tax shield and markets are also inefficient. In that situation for decision makers, it matters what should be the optimal mix of capital structure where cost of capital should be minimum. So, trade-off theory forecasts the cost and benefit analysis of debt financing to achieve optimal capital structure. According to static trade off theory profitable firms will raise more debt as its interest will give them tax shield. In past scholars found diverse outcomes such as [Rajan and Zingales \(1995\)](#); [Fama and French \(2002\)](#) found conflicting results to trade off theory; firms with high profitability borrow less which is against the theory. As decision making process by corporate governance is a cognitive process where top management must choose the best available alternative based on their own believes, experience, qualification and culture. If we consider the Hofstede cultural dimensions specifically, Uncertainty avoidance and individualism, it explains that why companies in specific countries prefer more debt over the equity. Culture of these countries have lower values of uncertainty avoidance, so individuals are willing to accept upcoming improbability. Countries with more corruption and weak laws have higher debt ratio especially short-term debts. So, in determinants of capital structure other than existing company specific and governance factors one more feature should be considered while making decision which should be culture of that country.

### 2.1.3 Pecking Order Theory

Another significant theory that has dominated capital structure literature is the pecking order theory ([De Jong et al., 2011](#)). This projecting theory is related to capital structure that aims to finance company operations with its internally generated funds, 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 reinvestment and firms must depend on debt. According to [Modigliani and Miller \(1958\)](#), in perfect capital market a firm's dividend decision does not affect its value of the firm. As [Jarallah et al. \(2019\)](#) in Japan, [Oktavina et al. \(2018\)](#) in Indonesia, [Zeidan et al. \(2018\)](#) in Brazil 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 .But in current period where behavioral finance has taken its place new evidences are found that some overconfident managers prefer equity over debt underestimating the future earnings as they believe that there equity is undervalued so they prefer to issue equity on raising debt which is violation of pecking order theory ([Malmendier et al., 2007](#); [Gervais, 2009](#); [Vivian and Xu, 2018](#)).

Frank et al (2020) observed that firms with very high deficits rely much more on equity than debt which is contrary to pecking order theory. In its justification they say that other than financial factor such as transaction cost or agency frictions, behavioral factors also influence the decision of managers. This behavior of managers is explored under “managerial biases” and the biasness in behavior is due to the fact that managers are rational and show deviation from rules according to their judgment which is either intuitional or based on their past experience or education etc. while Intuitions are based on the culture from which the person belongs so indirectly manager's decisions are based on their cultural values. Hofstede cultural dimensions specially IND vs Collectivism, short term vs long term orientation and uncertainty avoidance affects the firms' policies for distribution of dividend and retained earnings due to which board must opt between debt or equity, again this decision will be pushed by their intuitions.

#### **2.1.4 Market Timing Theory**

In [Baker and Wurgler \(2002\)](#) gave 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 important thing is the situation of the market. Consistent with the pecking order theory, this theory also explain that corporations do not target to optimal level of leverage rather take the benefit of market situation. Baker and Wurgler (2002); Frank and Goyal (2003) believed that if market to book value of the equity is high and share are overvalued, firms will issue new shares and in case of undervaluation, they will buyback equity to concentrate the ownership. It means that capital structure does not follow the hierarchy of pecking order theory or trade off theory rather will depend on market timings. Board of governance will analyze, is the market timing suitable for the issuance of debt or equity? Again, this analysis is based on the management perception about the value of equity, either it is overestimated or underestimated in the market and their opinion can be biased. According to biases of behavioral finance, overconfident and optimist manager will overvalue, and pessimist will undervalue their equity. Their optimist or pessimist behavior is influenced by the demographic situation and culture of origin. Arosa et al. (2014), investigated the impact of Hofstede cultural dimension on market timing theory and found significant results showing the influence of culture on managerial decision using market timing theory. Antonczyk and Salzmann (2014) managers in countries with high level of individualism are overconfident and optimist. If they are optimist about the overvaluation of equity they will prefer to issue equity. on the other side, if they show this optimism toward the stability of future profit their choice will be debt.

### 2.1.5 Agency Theory and Capital Structure

Agency theory presented by Jensen and Meckling (1976), describes the relationship between agent (corporate governance) and principle (shareholders). Both have their own interests which become the reason of conflict between the parties. Due to lack of information on the other side, one can enjoy unfair gain on behalf of the other party. in case, if shareholders do not have complete inside information, management can take more risk staking shareholders' interest. Opposite to this, principle (shareholders) can also use techniques to restrict the decisional power of management to get their own benefits. According to agency theory it is necessary for firms to have optimal capital structure Jensen and Meckling (1976) argue that

optimal mix of debt and equity at time of issuing external sources will not only minimize the cost of capital but also will reduce agency cost. Agency theory confirms the importance of pecking order theory arguing in favor that if firms prioritize the available internal funds at time of need their will be either no or less issues of agency.

Contrary to this behavioral agency theory of [Pepper and Gore \(2015\)](#) says that humans are not rational, they are not homo economicus. The norms, beliefs, values and other features of culture effect the nature of agency problems between managers and equity holders ([Johnson, 2004](#)) and regulate the acceptance of debt level in the capital structure of the firm. In this way culture impacts differently on capital structure around the globe. [Davis et al. \(1997\)](#) states that agency theory assume agents are individualistic in behavior which is debatable as their behavior depends on their culture. [Li et al. \(2011\)](#) also studied the culture effect on these managers in chines firm and found that in high mastery (Masculinity) culture managers avoid to lose control due to more supervision in case of higher debt, so they prefer equity over debt even when debt can be acquired at a lower cost.

The agent and principle both are human beings with different inner information because of which they will act either as a risk taker or risk averse, as [Hofstede \(1984, 2001\)](#) discussed that management decision are not just based on facts but also will be influenced by their culture as Hofstede cultural dimension discussed above in section 1.5 such as PD, IND, MAS, UNC \_AVOI, LTO and INDLG. All these dimensions affect the behavior of an individual so conflict of interest can arise between agents (Management) or Principle (equity holder) due to national culture.

### **2.1.6 Stakeholder Theory**

This theory says that just agent and principle of agency theory are not sufficient to explain the decision of capital in a firm, different stakeholders such as firm's customers, middle level of management, workers and suppliers are also as important while taking into account the decision of leverage ([Titman, 1984](#)). Firms must ponder the expectations of stakeholders, irrespective of the of power they

hold and their ability to impact business activity. In this perception, all stakeholders have the right to be informed about financial aspects of their business. In case of FMCG customers have less concern with firm decisions of leverage but where they are dealing with durable or inimitable products, firm's insolvency may enforce costs on its customers (such as the unavailability to obtain the product, its parts, or interrelated services), suppliers (may stop working with the firm) and employees (may consider it obstacle for advancement or growth in job).

These costs might be transferred to the shareholders in the form of inferior prices for the firm's product offered by customers, leading to lower return and lower production of that product and observing this situation suppliers may be reluctant and stop doing business with the business, all this situation leads to opportunity cost of specialized worker/ employees who are either not willing to apply or want to switch jobs where they feel more secure. So, firms who gives more importance to these factors will include less debt in their capital as compare to those organizations for which this effect is no/ less important. As these more leveraged firms consider that they have less bargaining power with employees, customers, lenders and suppliers as compare to those firms who have low ratio of debt in their capital. Giving value to stakeholder from management is also a subjective matter as response of manager toward stakeholders depends on their culture. As mentioned above its right oof stakeholders to be informed about financial aspects.

In scholars' opinion, such as [Van der Laan Smith et al. \(2005\)](#) national culture is a key determinant that actually effects the behavior of managers in relation to disclose information to stakeholders. Similarly, national culture also framework's the outlines of a context in which the stakeholders act in response to the information disclosed by the company. [Vitolla et al. \(2019\)](#) observed the relation of Hofstede cultural dimension with respect to disclosure of information to stakeholders and concluded that firms operational in countries with a cultural of less values of power distance, high uncertainty avoidance and lower values on Individualism and masculinity, have major emphasis on the issues of ethics and good governance. Therefore, these firms offer higher-quality reports with detailed disclosure of information required by all interested parties. Ultimately their culture will affect on their decision to be part of those high leveraged firms and vice versa.



### 2.1.7 Behavioral Biases

Financial analyst argues that what is known about capital structure in presence of capital structure theories is still very little, as these theories do not seem to describe financing behavior (Myers and Majluf, 1984). Hence, the question is still here: which determinants are important in capital decision (Frank and Goyal, 2009). In last few decades scholars have documented that process of financial decision making is subjective, managers decisions show deviations from rational decision making due to behavior of executives. Behavior of irrational managerial refers to their actions that deviate from rational opportunities and the maximization of the manager's expected efficiency. This trend of thoughts emerged a new discipline, behavioral finance, that recommends that psychological stimuluses and biases affect the financial behaviors of stakeholders and financial practitioners. Different behavioral biases are important in finance such as familiarity bias, overconfidence bias, confirmation bias, disposition bias, experiential bias, present bias, loss aversion and mental accounting. These biases lead the managers toward irrational behavior. In view of risk averse bias managers avoid debt financing as they overvalue the associated risk in presence of debt and related bankruptcy cost, consequently risk averse executives avoid to use debt than non-risk averse managers.

Contrary to this, optimistic manager undervalues the occurrence of bad events so these managers follow pecking order theory (POT) which use finance in a hierarchy of retained earnings, debt and in last equity is used as source of finance as in their opinion equity cost more than debt. Directors with a present bias are considered more impatient, they tend to choose capital that rewards higher short-term returns rather than choosing alternative opportunities which gives long-term sustainability. Opting for present, risk averse, optimist bias or any other behavioral bias depends on the values of the manager which are directly related with the culture of the decision maker so cultural finance shows its influence on behavioral finance ultimately leading the manager toward irrational decision making. Hence, culture, behavioral finance and capital decision are interlinked which is studied under cultural behavioral finance theory. This theory explains the difference in behavior of managers in across multiple countries.

All the theories discussed above provide guiding principle about how firms can improve their value through appropriate mix of debt and equity in their capital structure. However, these rules cannot be generalized for each type of firm or business due to the unrelated attributes of the corporations and economic situations of the nations.

## 2.2 Literature Review

Capital structure is one of the most important issues for companies and has become one of the most debatable subjects in finance (Bradley et al., 1984). Berk and Titman (2017) defines capital structure as the contribution of debt, equity, and other sources that a firm have as its capital. Prior scholars and researchers such as Modigliani and Miller (1958); Jensen and Meckling (1976); Myers (1977); DeAngelo and Masulis (1980); Chui et al. (2002); Fama and Jensen (1983); Sekely and Collins (1988); Rajan and Zingales (1995); Gleason et al. (2000); Deesomsak et al. (2004); Gaud et al. (2005); Bancel and Mittoo (2004); De Jong et al. (2011); Griffin et al. (2009); Frank and Goyal (2009); Breuer and Quinten (2009); Li et al. (2009); Kayo and Kimura (2011); Fan et al. (2012); Antoczky and Salzmann (2014); Hilgen (2014); Nadler and Breuer (2019) found different determinants affecting the choice of capital, the factors documented by these researchers include company specific ,governance variables and cultural impact across the countries .

Initially scholars believes that it is the firm specific and CG determinants which affect the choice of capital but literature explored contradictory results with opposite signs for same determinant which created brainstorming among scholars to solve the missing piece of the puzzle of ‘optimum capital structure’ the best mix of debt and equity. They want to investigate that why same variable displays both positive and negative relation with capital structure. In recent few years scholars discovered that ‘National Culture’ can be the missing piece of this puzzle as it was explored by researchers that determinants of governance are strongly influenced by the culture of their country. Initially Newman and Nollen (1996) examined the link of national culture to business practices. After their work even more than two decades gap, however, few studies have taken culture into account but some are

just empirical and other are either based on firm specific or governance determinants with few cultural dimensions in process of determining the capital structure of firms. The Hofstede's cultural dimensions can be associated both theoretically and empirically to the capital structure of firms. The direct relation of Hofstede dimensions means that culture has a positive impact on decisions of capital structure of firms and indirect link means that the dimensions influence the effect of firm-level factors.

In the following section all firm specific, governance and cultural determinants having impact on capital structure are discussed in reference of prior literature and theories.

## 2.2.1 Firms Specific Determinant

On the bases of prior study, this study aims on the following internal characteristics of the firm which influence the decision of capital structure.

### 2.2.1.1 Liquidity

The customary opinion is that liquidity increases debt capacity of the firm (Williamson, 1988; Harris and Raviv, 1990; Shleifer and Vishny, 1992). According to Sibilkov (2009) firms having more liquid assets shows more trends of long-term debt. Morellec (2001) reveals that liquidity increases debt ability of firm only when these firms have collaterals for issuing bonds or long-term debt and vice versa. These outcomes are consistent with the theory of bankruptcy, in presence of tangible assets firms can hire loan at a lower cost because creditor will feel secure which reduces the financial distress cost and ultimately will reduce chances of bankruptcy. Harris and Raviv (1990); Shleifer and Vishny (1992) also found positive relationship between liquid assets and long term debt which is consistent with trade off theory, with more leverage firms enjoy tax shield and higher profit will be there so according to the above mention theories of capital structure liquidity should increase leverage.

Contrary to this pecking order theory, signaling theory and free cash flow theory expects negative relation with leverage arguing that managers of the liquid firms

will increase their reserves as 1st preference for reinvestment which gives a signal to market that firm have ability to utilize its resources efficiently, resulting the increased value of firm. [Deesomsak et al. \(2004\)](#) argued that managers can deploy liquid assets in favor of stockholders contrary to the interest of creditors, increasing the agency costs of debt. So negative relationship will be expected in liquidity and leverage. [Eriotis et al. \(2007\)](#) also expected the use of pecking order theory by verifying negative relation between leverage and liquidity claiming that when there will be higher debt, firms' current liabilities will increase, decreasing free cash flow for investing and operational activities. [Sheikh and Wang \(2012\)](#) worked in emerging market of Pakistan and found negative relation between liquidity and capital structure confirming pecking order theory that firms with liquid assets prefer to finance internally to avoid the higher interest rate payable on external debts as countries in emerging market like Pakistan have higher interest rate which increases risk of distress and insolvency that's the reason firms in these countries follow pecking order theory in presence of liquid assets. [Noor et al. \(2015\)](#) shows consistency with these above discussed theories (pecking order and signaling), observing negative relation of liquidity and long term debt. [Hossain and Hossain \(2015\)](#) findings are align with the above discussed literature as they said firms with high liquidity have ability to generate more cash inflows to reinvest and generate profit, these outcomes supports the pecking order theory (POT) and free cash flow theory (FCFT). Consistent with Pecking order theory few theoretical and empirical studies by [Ozkan \(2001\)](#); [Antoniou et al. \(2002\)](#); [Niu \(2008\)](#); [Serghiescu and Văidean \(2014\)](#); [Sheikh \(2015\)](#); [Yang et al. \(2015\)](#); [Cevheroglu-Acar \(2018\)](#); [Khaki and Akin \(2020\)](#); [Amin et al. \(2022\)](#) supports negative relation between liquidity and leverage. Question: why different theories show different relations between liquidity and leverage?

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

#### 2.2.1.2 Tangibility (TANG)

The non-current assets of the company which are used to generate profit in business, these assets are physical, touchable and measurable i.e., land, building, plant, vehicles and equipment. At the time firms require funds, these assets can be used

as collateral to acquire debt from banks. As these tangible assets can easily be liquidated therefor tangible assets i.e., land and building are widely used securities against external borrowings. So higher the available collateral, higher ability of firms to acquire loan at lower rates as firms will be in bargaining power, this will also reduce distress cost and bankruptcy cost (Chen, 2004).

This relation is according to the theories of capital structure i.e., Trade off theory, agency theory, bankruptcy cost theory, net income theory. Alipour et al. (2015) argued in favor of trade off theory that availability of collaterals provide more ability to firms to gain more debt at lower cost, reducing the chances of bankruptcy as it reduces the risk of creditor (Delcoure, 2007). Marsh (1982); Long and Malitz (1985); Titman and Wessels (1988); Van der Wijst and Thurik (1993); Rajan and Zingales (1995); Michaelas et al. (1999); Bevan and Danbolt (2002); Huang et al. (2006); Lemmon et al. (2008); Hovakimian and Li (2011); Alipour et al. (2015); Cevheroglu-Acar (2018); Khaki and Akin (2020); Ahmad et al. (2018); Amin et al. (2022) confirm the expected relation of tangibility and leverage, positive relation will be there between the above variables.

In contrary to the above scholars' findings various academicians found the negative relation between tangibility and non-current assets, proving the application of pecking order theory (Karadeniz et al., 2009). Deesomsak et al. (2004); Mazur (2007); Hossain et al. (2012); Karacaer et al. (2019) found negative relation by arguing that as tangibility increases, the firms face less problems of asymmetric information, so these firms prefer to issue equity over debt.

Booth et al. (2001), studied the effect of tangibility in ten 10 different emerging countries and was surprised that in every country this relation of debt and leverage is different, even in same country the relation for Long term, short term and total debt is different with tangibility. Here he concluded the effect of country variable effecting the decision of tangibility and leverage. This country effect can be the culture of the country as discussed by Hofstede in cultural dimensions.

## **Hypothesis 2.**

There is a positive relationship between growth and leverage.

### 2.2.1.3 Profitability (PROF)

The ability of a firm to generate revenue from its operational activities is called its profitability. Profitable firms have retained earnings which are the 1st and foremost source of finance, because it is not only cost zero to the firm rather give positive signal to the prospective investor that firm is efficiently using its resources and increasing the wealth of the shareholders. According to pecking order theory by Myers and Majluf (1984), retained earnings are at the top preference of the profitable firms to use as source of finance because it is not only a risk-free investment rather it increases the confidence of investor.

Consistent with pecking order theory a number of empirical evidence can be found in literature such as Titman and Wessels (1988); Friend and Lang (1988); Amidu (2007); Allen (1991); Rajan and Zingales (1995); Shyam-Sunder and Myers (1999); Booth et al. (2001); Fama and French (2002); Chen (2004); Chen and Strange (2005); Gaud et al. (2005); Kim and Berger (2008); Frank and Goyal (2009); Sheikh and Wang (2011); Hovakimian and Li (2011); Forte et al. (2013); Karacaer et al. (2019); Ke and Xiong (2016); Khan et al. (2016); Cevheroglu-Acar (2018); Khaki and Akin (2020); Ahmed (2021) found negative relation between profitability and debt. They suggested that highly profitable firms use internal source of finance in order to avoid information symmetry and cost of external debt.

Opponents of this argument claims that as the firms become more profitable, distress cost and probability of bankruptcy will decrease while free cash flow will increase, increasing the bargaining power of firm with creditors. Thus, these mature profitable firms will avail this opportunity and use debt as source of finance because at one side its cost will be low as creditors know the worth of profitable firms that their funds will be more secured with these firms.

On the other side, as trade off theory suggest, firms will enjoy tax shield due to interest expense (Long and Malitz, 1985; Buferna et al., 2005; Frank and Goyal, 2009; Amin et al., 2022). According to signaling theory when profitable firms take loan it will give a positive signal to the market, to both lender and investor that firm is in growth stage having a profitable project which will increase its value. So, creditor will be willing to give loan at lower cost of capital. According to agency

theory profitable firms lean towards raising more debt in order to decrease agency cost associated with managers' misuse of free cash flow (Jensen, 1986).

**Hypothesis 3.** There is a negative relationship between profitability and leverage.

#### 2.2.1.4 Firm's Size (SIZE)

In practical corporate finance, firm size is an important, fundamental characteristic of firm which is commonly used as determinant of capital structure. Multiple proxies are generally used to measure this variables such as total assets Lougee and Marquardt (2004), total sales Shehata (1991), book value of equity Beaver et al. (1982); Kasznik and McNichols (2002) or market value of equity (Charitou et al., 2001). For the purpose of current theses Market capitalization is used to measure the size of the firm which is the market value of outstanding shares of the company. Contradiction of theories persist here again, trade off theory shows positive relation and pecking order theory's indication is negative for the two variables i.e., leverage and size of the firm. Ang et al. (1982) arguing in favor of trade off theories suggest that as the size of the firm increases, firms have more assets to use as collaterals and cost associated with bankruptcy will decrease. Therefore, larger firms have ability of higher level of debt in their capital structures (Titman and Wessels, 1988). Marsh (1982) results shows that leverage depends on the size of the firm, larger firms have tendency of more debt as compared to smaller firms preferring equity over debt. As these larger firms are enjoying the economies of scale so they have bargaining power on cost of debt with lenders due to which they can take loan at lower cost as compare to firms smaller in size, this can be the reason of their preference of debt over equity (Michaelas et al., 1999; Huang et al., 2006). According to free cash flow theory of Jensen (1986), larger firms have stable cash flows due to which they have less chances of bankruptcy and financial distress which is a positive point for acquiring debt with more bargaining on cost from creditors, (Graham et al., 1998; Wiwattanakantang, 1999; Gaud et al., 2005). In short, firms with larger size, lower risk of financial distress, less chances of bankruptcy and stable cash flows have advantage of bargaining with creditors and enjoy long term debt at lower cost, (Agrawal and Nagarajan, 1990; Harris and Raviv, 1991; Berger et al., 1997; Gaud et al., 2005; Frank and Goyal, 2009;

Cwynar et al., 2015; Karacaer et al., 2019; Cevheroglu-Acar, 2018; Moradi and Paulet, 2019; Khaki and Akin, 2020; Ahmed, 2021).

Above scholars concluded that size of the firm is related with traded off theory with positive sign between two variables, at the same time different researchers are proving negative relation between debt and size of the firm, arguing in favor of pecking order theory. Fama and Jensen (1983) proved negative relation between leverage and size, they believed as the size of firm increases, due to agency issues, it is required by the firm to publish more information to the public so more inside information will be available to the outsider investor. Due to lower information symmetry firms prefer to issue equity over debt (Kim and Sorensen, 1986). Rajan and Zingales (1995) studied G-7 countries this relation and found positive and negative relation at the same time, except Germany all other countries show positive relation, they argued in the favor of results that larger firms have more diversified portfolios which reduces its chances of bankruptcy, also in these countries the bankruptcy cost is low so companies prefer liquidation at time of distress, they follow trade off theory and rely more on debt which at one side is a signal of growth to the investor. Contrary to this due to lower information symmetry firms prefer equity over debt so they found negative relation between two variables in Germany where bankruptcy cost is also high. Güner (2016) also found a negative association between the two variables in Turkish firms. Other scholars such as Chen (2004); OKUYAN and TAŞÇI (2010) provide the negative relationship between firm size and debt level. This contradiction of relation between the two variables is debatable that due to which factor same variable have different effect on capital structure, this may be due to the management taking decision, their attributes and values, which are based on their culture, this can be the reason for the choice of issuing debt or equity by the corporate managers.

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

#### 2.2.1.5 Growth (GROW)

Growth opportunities means firms projects which have tendency to grow in future and can generate cash flow for the business. As the corporations grow, their required finance inclines to surge. To meet this increasing demand mature firms,



use internal finance. If a firm completely depend on internally available resources, then it may be a cause of restriction for growth. Managers may relinquish for some gainful projects. Opposite to this if a firm goes for external finance, chances of risk increases. Researchers such as [Jensen and Meckling \(1976\)](#) using Agency cost theory argue that manager use the funds of creditors to generate the wealth of shareholders, increasing the risk of bondholder. This can increase the cost associated with debt, to avoid such conflicts firms use less debt. [Titman and Wessels \(1988\)](#) findings support the [Jensen and Meckling \(1976\)](#) results ,but [Myers \(1977\)](#) differentiating the use of long term and short term debt ,he was of the opinion that growth opportunity increase the assets and value of the firm but all this growth is not in not non-current assets so cannot be used as collaterals and non-guaranteed funds can be acquired by firm at higher cost increasing risk of insolvency and distress cost, it also create agency problems, so firms do not use long-term debt but they can use short term loans which mitigate the agency problem and distress cost. Here positive relation is found between short term debt and leverage. [Bradley et al. \(1984\)](#) findings on distress cost reveals the above fact concluded by [Myers \(1977\)](#), that growth opportunities increases firm value with addition of non-collateral assets increasing bankruptcy cost. This also support the trade off theory, in absence of tangible assets firms have difficulty in acquiring long term debt, it will cost high increasing risk of the firm, leading to insolvency. A number of scholar's findings support the negative relation of growth opportunities and leverage [Long and Malitz \(1985\)](#); [Kim and Sorensen \(1986\)](#); [Rajan and Zingales \(1995,?\)](#); [Allen \(1995\)](#); [Ozkan \(2001\)](#); [Barclay and Smith \(2005\)](#); [Gaud et al. \(2005\)](#); [Huang et al. \(2006\)](#); [Akhtar and Oliver \(2009\)](#); [Frank and Goyal \(2009\)](#); [Sheikh and Wang \(2011\)](#); [Handoo and Sharma \(2014\)](#); [Karacaer et al. \(2019\)](#); [Güner \(2016\)](#); [Inderst and Vladimirov \(2019\)](#) indorse the above-mentioned theoretical and empirical outcomes.

Inconsistent with the above arguments there are a list of scholars who found positive relation between growth and debt. [Lang et al. \(1996\)](#) reports that according to signaling theory generally the firms with the high earnings and growth opportunities will engage in high leverage, he argues that if it gives positive signal to equity market that in future firm's value will increase, same signal will be observed

by debt market so creditor will prefer to give loan with low interest rates. Wald (1999) reported the variable show positive relation in developed market, except the U.S. Chen (2004) worked on Chinese firms finding positive relation of growth-leverage, reporting that equity market knows the value of growth in business so the same do the banks, willing to provide loans at lower cost. Nha et al. (2016) results in emerging market of Vietnam show positive relation, reporting that if growth is in term of sales, it can increase firm value. Cevheroglu-Acar (2018) also found positive relation between growth and leverage in Turkish firms.

**Hypothesis 5.** There is a negative relationship between growth and leverage.

Question arises that in contrary signs for firm specific determinants how managers will take decision to follow pecking order theory or trade off theory? Literature is silent about this question. This hidden feature can be the characteristics of corporate governance, or it can be the culture of the decision maker which have strong influence on the choice of a person. In the following section literature review of CG variable with leverage has been discussed.

#### 2.2.1.6 Leverage

Previous year long term debt can also affect the future leverage of the firm. Firms containing long term debt in their financial statement know the advantages of Tax shield, to take more advantages of tax shield firms in future also prefer to include debt in their capital structure. In this study lag of dependent variable leverage is used as in dependent variable and tried to investigate the impact of previous year long term debt on future capital structure.

**Hypothesis 6.** There is a negative relationship between previous long term debt and future leverage.

### 2.2.2 Corporate Governance Characteristics

According to Monks and Minow (1995) corporate governance is the association among different members such as chief executive officer, management, equity holders and employees, in defining the roadmap and measuring the performance of

corporation. In words of [Shleifer and Vishny \(1997\)](#) “the ways in which supplier of finance to corporations assure themselves of getting a return on their investment”. They pointed in their study toward different aspects of governance, that how manager will ensure the return of profit to investor, how investor will be able to know about investment of its capital that either manager has invested it in a good or bad project, how the investor can control the manager? Here shareholders are the principle and board are agent, working to increase the wealth of the shareholders.

But problem arises when board members work for their own interest as explained by agency theory. This problem will be more critical when majority shareholders enjoy their decisional power on cost of minority shareholders. That is why practitioners and academicians have consensus about the importance of good corporate governance rules in the economy. To overcome the questions of [Shleifer and Vishny \(1997\)](#) Sound corporate governance practices are required which can assure the sustainable growth of the corporations as it will help in emerging the trust of investor and creditor. Every country has its own rules to control and regulate this governance method at corporate level. Although these rules and SOPs are not too vigilant in emerging economies as we can see its implication in developed economies. [Barca \(1995\)](#); [Pagano and Volpin \(2005\)](#) studied that these governance practices are even invisible in less developed economies.

All strategic and tactical decisions of the firm are also taken by the board members, even including the decision about the capital structure of the firm. So, it's a key determinant of capital structure. It's important to know about the various attributes of corporate governance. Prior scholars such as [Salancik and Pfeffer \(1978\)](#); [Fama and Jensen \(1983\)](#); [Jensen \(1986\)](#); [Gales and Kesner \(1994\)](#); [Berger et al. \(1997\)](#); [John and Senbet \(1998\)](#); [Monks \(2001\)](#); [Wen et al. \(2002\)](#); [Kapopoulos and Lazaretou \(2007\)](#); [Abor \(2007\)](#); [Adams and Ferreira \(2008\)](#); [Butt and Hasan \(2009\)](#); [Lehn et al. \(2009\)](#); [Uadia \(2010\)](#); [Chen and Chen \(2012\)](#); [Arosa et al. \(2013\)](#); [Sheikh and Wang \(2012\)](#); [Uwugbe \(2014\)](#); [Budiman \(2015\)](#); [Omorotun et al. \(2015\)](#); [Marashdeh \(2014\)](#); [Kyriazopoulos \(2017\)](#); [Sheikh et al. \(2018\)](#); [Ahmad et al. \(2018\)](#); [Adusei and Obeng \(2019\)](#); [Kajola et al. \(2019\)](#); [Sheikh \(2019\)](#); [Bhagat and Bolton \(2008\)](#) board size, dual position of the CEO, gender diversity,

foreign directors, non-executive directors, independent directors, managerial ownership, foreign ownership, demography of directors, institutional ownership and family ownership are the main characteristics of the board. For the current study, Board size, Dual position of CEO, gender diversity, independent directors and foreign directors are taken as independent variable to determine the capital structure of the firm as these determinants are measurable, their secondary data is available and these CG elements are directly influenced by the culture of the country of their origin.

### 2.2.2.1 Board size (BSZ)

Board of directors are the main dome of the corporate body, performing central role in the performance of the firm, their importance is clear from their responsibility of taking all strategic decision of the firm, so it is the important attribute of corporate governance. In simple meanings, board size represents the logarithm of the number of directors present on the board. There is no fix number, it varies from country to country, but generally a good board consist of 7 to 9 members. In literature it is a debatable question that a firm should have larger or smaller board and how the size of board affects leverage decision. According to Agency Theory a larger board decreases the efficiency of the board as more directors' means more conflict in decision making, meaningless discussion, time consuming at time of taking quick decision, more lobbying and there is free rider which enjoy the benefit on the cost of others [Lipton and Lorsch \(1992\)](#). [Hermalin and Weisbach \(2001\)](#) argued against the larger board, in their view when board is too big, it just gives symbolic representation and forget the basic function of its formation. But scholars in its favor says that larger board is more diversified in term of age, gender, qualification, independence, experience and nationality. These features boost their decision-making process and enable them to surge the value of shareholder, [Kiel and Nicholson \(2003\)](#); [Dalton and Dalton \(2005\)](#).

In relation of board size and capital structure contradictory views are found in literature. [Berger et al. \(1997\)](#); [Adams and Mehran \(2002\)](#); [Mak and Kusnadi \(2005\)](#); [Abor \(2007\)](#); [Butt and Hasan \(2009\)](#); [Bodaghi and Ahmadpour \(2010\)](#); [Heng et al. \(2012\)](#); [Ganiyu and Abiodun \(2012\)](#); [Uwuigbe \(2014\)](#); [Abobakr and](#)

Elgiziry (2016); Kyriazopoulos (2017); Yusuf and Sulung (2019); Ullah et al. (2022) found negative relation between board size and leverage, arguing in its favor that more number of directors increase the monitoring of manager who in pressure keep low leverage and improve their performance by the generating more internal funds.

Antagonistically, literature also prove the positive relation between board size and leverage, in its favor scholars argue that it's consistent with the resource dependence theory suggesting that larger board takes an advantage of its diversified knowledge, skills and experience to use external available resources efficiently, they take advantage of greater monitoring from regulating authorities .As trade off theory suggest for increasing the value of firm by raising funds at lower cost of capital and enjoying tax shield ,larger board shows more tendency toward debt.

Creditors also feel more secure when firms applying for debt have larger governance board, the lenders consider that these firms are being supervised more efficiently by a diversified portfolio of specialists who will increase the value of the firm and reduces its probability of bankruptcy, firms also take advantage of bargaining and takes more loan at lower cost (Anderson et al., 2004). Outcomes of the research work of Salancik and Pfeffer (1978); Jensen (1986); Lipton and Lorsch (1992); Wen et al. (2002); Anderson et al. (2004); Kyereboah-Coleman and Biekpe (2006); Abor (2007); Bokpin and Arko (2009,?); Sheikh and Wang (2012); Ganiyu and Abiodun (2012); Kumar and Singh (2013); Rajangam et al. (2014); Jaradat (2015); Naseem et al. (2017); Esparza et al. (2018); Zaid et al. (2020) depicted positive relation between board size and debt.

In the light of above literature, same variable of corporate governance, board size, depicts dissimilar results with capital structure. This divergence in results require some explanation but literature is silent in explaining this difference. Here in the current thesis, by introducing cultural dimensions of Hofstede, it will be found out that the possible reason of this divergence between board size and leverage can be culture of the board members.

### **Hypothesis 7**

There is a positive relationship between board size and leverage.

### 2.2.2.2 CEO Duality/ CEO as Chairman

An important feature of effective and efficient corporate governance is the dual position, chairman and CEO, held by same board member, (Dalton et al., 2007). This position has direct impact on the financing decision of the company, as it will increase the power of single person who can influence decision making process specially related to raising funds. Opposite findings are found in literature, positive and negative both results are present which raise question and make it debatable. Fama and Jensen (1983), argued that role of the chief decision management authority (CEO) should be separated from the chief control decision authority (Chairman), otherwise if management and decision making will be in hands of same person it will create agency problem. Krause et al. (2014) documented that CEO with dual position have potency to decide the maximization of own benefits at the expense of shareholders, it will limit the independence of board as CEO with dual power can influence the other members opinion with its higher position. Daily and Dalton (1994a,b), were of the view that more positions held by a single person would permit them to persist the status quo position, even when the performance of the firm is worst, they will remain rigid on their decision which can reduce firm performance, this would increase the likelihood of bankruptcy. While Donaldson and Davis (1991), were of the opinion that dual place make the corporate leaders position more clearer to the subordinates and managers, which leads toward unitary direction and decrease the conflicts of interest, lower the cost of information leading toward better performance (Miller and Friesen, 1977; Anderson et al., 2004; Dalton and Kesner, 1987; Donaldson and Davis, 1991; Brickley et al., 1997; Adams et al., 2005; Ramdani and Witteloostuijn, 2010; Gill and Mathur, 2011). Alves (2020) confirms the implication of stewardship theory which suggest that containing dual positions increases the efficiency of the CEO due to unitary of command. Because responsibilities and decisions restricted to one individual might accelerates the understanding and knowledge of the company operations and improved decisions which may result in reducing the agency costs and have positive impact on firm performance.

As CEO with dual position can directly influence the capital decision of the firm. In literature both signs are found between CEO Duality and leverage. Donaldson

and Davis (1991); Wen et al. (2002); Abor (2007); Abor and Biekpe (2007); Bokpin and Arko (2009); Vaklifard et al. (2011); Hewa Wellalage and Locke (2012); Nazir et al. (2012); Mokarami et al. (2012); Ranti (2013); Uwuigbe (2014); Bajagai et al. (2019); Zaid et al. (2020) found positive relation between CEO duality with leverage. They explored the application of stewardship theory in favor of more positions held by CEO, arguing in its favor that with more centralized decision making authority, firms enjoy less communication problem, CEO will depict higher motivation as he thinks that he is not just the employee rather the partner of the firm, this will be the reason of increased sincerity toward the firm, so he will take efficient decision to increase the value of the by using more debt.

Contrary to this Fosberg (2004); Kyereboah-Coleman and Biekpe (2006); Ganiyu and Abiodun (2012); Njuguna and Obwogi (2015); Ahmad et al. (2018) found negative relation between CEO duality and leverage. According to agency theory the planning and its implementation should be in separate hands for independent monitoring and better performance of the board otherwise agency cost will increase, discouraging the creditors to lend these entities Jordanian (2006) argued that CEO and Chairman have different type of responsibilities and to avoid the conflict of interest this position should remain separated. Brown and Caylor (2009) found that firms with isolated positions of CEO and chairman have better chances to get loans from financial market which shows more trust of lenders on the monitoring role of the board so inverse relation will be there. Bokpin and Arko (2009) discussed the dual position and argued that when CEO and chairman are separate, they choose to raise funds through issuance of equity instead of debt so there will be negative relation between CEO duality and leverage.

A few scholars found no significant relation between CEO Duality and financial leverage such as (Wang and Deng, 2006; Butt and Hasan, 2009; Bokpin and Arko, 2009; Heng et al., 2012; Sheikh and Wang, 2012; Ganiyu and Abiodun, 2012; Ahmad et al., 2018; Xuan-Quang and Zhong-Xin, 2013; Vintila and Duca, 2013; Chaabouni, 2013; Saeed et al., 2014; Agyei et al., 2014).

### **Hypothesis 8.**

**Ha:** There is a positive relationship between dual position of CEO as director and leverage.

**Hb:** There is a positive relationship between dual position of CEO as chairman and leverage

### 2.2.2.3 Female Representation

Gender diversity discusses the fair representation of different genders in various aspects of life. But in real world women do not get their needed position in fair and equal proportion as enjoyed by men of those societies. Women get place according to the norms, values and social culture of the respective society. Narrowing the focus of study on corporate governance, the presence of female segment in top management is very small. It is common believe around the globe that women are risk averse, more emotional, lack decision power and do not have strategic mind due to which they cannot take good business decision, so presence of females on top of the firm will give adverse signal to the investors leading the firm performance toward decline. Contrary to this school of thought, recent research on gender diversity suggests that women are more principled than men in attitudes and behaviors (Beltramini et al., 1984).

Becker (2009) mentioned gender diversity as human capital which signifies the exclusive aptitudes of the board of director from diverse training, experience, knowledge, values and cultural backgrounds. Markarian and Parbonetti (2007) argued in favor of this human capital that it can be used to describe the tactics which business practices in dealing with multifaceted circumstances and taking strategic decisions (Baysinger and Zardkoohi, 1986; Hillman et al., 2000; Singh et al., 2008; Dunn, 2012). Scholars suggested various benefits of diversified board with respect to gender.

Hillman (2015) arguing in its favor says that diversified board have more alternatives as compare to homogenous board, as female directors show higher rate of meeting attendance, there is more open questions and discussions, leading to new ideas, higher level of monitoring and controlling, all this increases the quality of decision taken by the governing bodies (Carter et al., 2003; Adams and Ferreira, 2009; Thiruvadi, 2012; Chen and Strange, 2005; Reguera-Alvarado et al., 2017). This will ultimately reduce the agency cost and increase the firms value (Davis et al., 1997; Hillman and Dalziel, 2003). So, agency theory encourages the presence



of female directors in the board as it will increase the monitoring and disclosure of information [Gul et al. \(2011\)](#) which increases the earning and performance of the firm.

In relation with gender diversity and capital structure different findings are available in literature. General finding of scholars about females financial decision in making choice of capital shows that female are risk averse, they prefer lower debt to avoid the problems of insolvency, ([Bajtelsmit and Bernasek, 1996](#); [Coleman, 2003](#); [Smith et al., 2006](#); [Ahern and Dittmar, 2012](#); [Mirza et al., 2012](#); [Faccio et al., 2016](#)).

[Carter and Cannon \(1992\)](#) 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. In contrast to this [Muravyev et al. \(2009\)](#) says it's not the reason of lower debt that women are risk averse rather they have less chances of getting loan from financial institutions such as banks which show reluctance in providing loan to the firm where managers are female, if they show willingness they charge higher interest. This increases the cost of debt and chances of bankruptcy which may lead female directors toward acquiring lower debt.

The findings of other scholars prove that presence of male or female gender in boardroom have no effect on the decision of capital structure ([Rose, 2007](#); [Cosentino et al., 2012](#); [Matsa and Miller, 2013](#); [Carter et al., 2003](#); [Grechaniuk and Coupé, 2009](#); [Isidro and Sobral, 2015](#); [Gordini and Rancati, 2017](#)). [Adams and Funk \(2012\)](#) argued that in boardroom it is indifferent for directors that which gender they have, as the women choosing carrier in finance already have shown their risk bearing attitude.

[Alves et al. \(2015\)](#) found positive relation between gender diversity and risky securities, believing that increase 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 inverse relation which shows that lower agency cost will lead toward optimal level of capital structure.

**Hypothesis 9.** There is a negative relationship between gender diversity and leverage.

#### 2.2.2.4 Independent Directors

Independent directors are the board members having no material interest or relation with the company other than salary, they are appointed by shareholders to reduce the agency cost. Independent directors give their true and fair opinion about the performance of the firm and management which do not only improve the creditability of the firm but also protect the rights of the minority shareholders (Baysinger and Butler, 1985; Young, 2000; Uzun et al., 2004). In presence of Independent directors, there will be more monitoring and less agency problems which increases the board efficiency and more disclosure of information will be there, giving positive signals to the market about the firm performance (Salancik and Pfeffer, 1978; Fama and Jensen, 1983; Vafeas, 2000; Klein, 2002; Ajinkya et al., 2005; Beekes and Brown, 2006; Cheng and Courtenay, 2006; Petra, 2007; Kanagaretnam et al., 2007; Butt and Hasan, 2009; Dimitropoulos and Asteriou, 2010). Better monitoring, controlling and higher information asymmetry also reduce the chances of bankruptcy. Trade off theory suggest that where agency and bankruptcy cost will be lower, the managers' choice for capital will be debt. Boards will lower agency costs are considered strong Maug (1997) and strong boards preference for capital is debt over equity (Harford et al., 2008). Weisbach (1988) found that managers at the top of hierarchy are under strong monitoring of these outside directors which improves their decision making ability. As presence of outside directors already giving positive indication to the lenders about the firm performance so debt will be available at lower cost and firms will be at higher gearing.

Literature of Salancik and Pfeffer (1978); Jensen (1986); Berger et al. (1997); Abor and Biekpe (2007); Sheikh and Wang (2012); Agyei et al. (2014); Kyriazopoulos (2017); Ahmad et al. (2018); Zaid et al. (2020) show positive relation between independent directors and leverage. On the other side as managers are under rigorous supervision of outside directors, issuing risky securities increases the problem for the manager, in case of distress they can be penalized. So, under the supervision of outside director's managers' work efficiently increasing the profits and value of the firm, to avoid the higher risk managers choice will be the utilization of internal funds (Frank and Goyal, 2008). This indicates the implication of pecking order

theory where managers make choice of internal over external funds. In that case negative relation will be there between independent directors and leverage. [Wen et al. \(2002\)](#); [Anderson et al. \(2004\)](#); [Al-Najjar and Hussainey \(2011\)](#); [Kuo et al. \(2012\)](#); [Akbari and Rahmani \(2013\)](#); [Uwuigbe \(2014\)](#); [Budiman \(2015\)](#); [Purag et al. \(2016\)](#); [Ullah et al. \(2022\)](#) found inverse relation between outside directors and long term debt.

There are many scholars who found insignificant results between the board independence and leverage such as [Mehran \(1992\)](#); [Kyereboah-Coleman and Biekpe \(2006\)](#); [Bokpin and Arko \(2009\)](#); [Butt and Hasan \(2009\)](#); [Bodaghi and Ahmadpour \(2010\)](#); [Heng et al. \(2012\)](#); [Pamba \(2013\)](#); [Javeed et al. \(2014\)](#); [Alabdullah et al. \(2018\)](#); [Vijayakumaran and Vijayakumaran \(2019\)](#); [Kajola et al. \(2019\)](#) found no significant relation, showing that presence of independent directors do not effect on the decision of leverage .

**Hypothesis 10:** There is a positive relationship between independent directors and leverage.

#### 2.2.2.5 Foreign Director

Literature is silent about the presence of foreign directors and debt decisions in firms, bur we can say that in presence of foreign directors there will be more diversity with respect to knowledge, experience, norms, race, ethnicity, education and personal values . More diverse board is more efficient, [Abor and Biekpe \(2007\)](#) preferring debt over equity. But opposing to the findings of above scholars [Masulis and Zhang \(2019\)](#) directors attending few meetings have more job turnover which reduces the knowledge and experience of the board, ultimately reducing the performance of governance board, which is also applicable for foreign directors.

**Hypothesis 11.** There is a positive relationship between foreign directors and leverage.

Most of the above Hypotheses have already been explored by the scholars as these are part of traditional finance however as discussed in introduction that Cultural Finance displays a revisiting function, since already well-researched questions in traditional finance are now be reconsidered more precisely in a new cultural light

considering all the cultural dimensions of Hofstede. So, the following hypotheses in sec 2.2.3 will clear the role of national culture in decision of capital structure. Investigation of firm and governance related hypotheses is important in the current study as it will provide a base of assessment that how the results of the above hypotheses incorporate culture effect

### 2.2.3 Cultural Dimensions

Earlier discussed predictors of capital structure at company and governance level shows that firms behave differently in making choice of capital. From the above discussion it is clear that although manger consider all theoretical approaches of capital structure at time of evaluation, but ultimate decision may oppose the recommendation of these theoretical models, [Breuer and Nadler \(2015b\)](#), which depicts the presence of any hidden variable effecting the decision of managers. This decision making process is under behavior influence and this biasness in behavior is due to the fact that managers are rational and show deviation from rules according to their judgment which is either intuitional or based on their past experience and education etc. These intuitions in managers behavior comes from the cultural values and norms which aid in forecasting the capital structure of the companies of a particular country. This influence of culture in financial decision-making process created a new field in research, “cultural finance”. [Breuer and Quinten \(2009\)](#) concluded that there exists a gap in the theoretical approaches that link economic and finance theories implicitly to cultural aspects. In this perspective [Nadler and Breuer \(2019\)](#) found that “Cultural Finance” revisit the already well-studied questions of traditional finance in a unique way with incorporation of cultural dimensions. In view of [Ahunov and Van Hove \(2020\)](#) these cultural dimensions matter more than the economic variables helping in understanding of financial literacy. Cultural dimensions of Hofstede and Schwartz are mainly used in corporate world for the purpose of behavioral understanding. Schwartz introduced the following seven dimensions: conservatism, embeddedness, hierarchy, intellectual autonomy, affective autonomy, mastery and egalitarian commitment. While Hofstede cultural dimensions include Power distance Index (high vs. low), Uncertainty avoidance index (high vs. low), individualism vs. collectivism, masculinity

vs. femininity, Long term vs. short term orientation and indulgence vs. restraint. These dimension affect capital decision directly or indirectly. Effect of culture in managers behavior effect directly the choice of capital, while at firm level these dimensions effect indirectly. In present study we took all Hofstede cultural dimensions to investigate the relationship of these cultural dimensions with leverage. In the following section Hofstede's six cultural dimension are discussed, further its theoretical link with capital structure theories has been developed.

### 2.2.3.1 Masculinity (MAS)

Masculine cultures show unlike directions for men and women as compared to feminine cultures. In Hofstede masculine culture, male is dominant, more powerful with strong leadership qualities, responsible for taking all kind of decisions followed by female members, more assertive, independent and risk taker. Countries such as Japan and Italy have higher values on MAS index showing male dominant society, in these societies so called ego goals are more important than collective goals, and this is same as [Chui et al. \(2002\)](#) locus of control. [Chui et al. \(2002\)](#) argued that in countries with high score of mastery managers do not want to lose their independence where they must disclose more information and scarify their autonomous position. To evade contingent situation in the future managers in masculine society avoid debt financing as they stress upon control, more authority and individual success. [Hirshleifer and Thakor \(1992\)](#) found that in masculine culture manager's care about their own performance so their choice will be safer projects with a higher probability of success, prefer to issue equity over debt. [Zheng et al. \(2012\)](#) also found negative relation between Masculine culture and long term debt but explaining this relation they said that male dominant society shows risk seeking behavior managers or shareholders want to see their achievements in physical form, for this they construct corporate kingdoms even taking too risky loans but at same time creditors relies the risk associated with this overinvestment so to secure the return they reduce the duration of these debts and prefer to issue more short term debt as compare to long term loans.

Contrary to this, [?Willemink \(2018\)](#) confirm the statement of [Zheng et al. \(2012\)](#) that MAS have direct relation with risk taking, but they found positive relation

between masculinity and long-term debt, to make growth. In favour of their results argue that the regulatory bodies of Masculine societies encourage the competition in financial system so they have strong policies for shareholders' rights protection. In presence of strong regulatory bodies and disclosure of information managers feel confident to take more loans for growth of the firm. [Malmendier et al. \(2011\)](#); [Zheng et al. \(2012\)](#); [Boubakri and Saffar \(2016\)](#); [Haq et al. \(2018\)](#) also found positive relation between Masculinity and debt .

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

### 2.2.3.2 Uncertainty Avoidance (UNC AVOI)

Uncertainty avoidance index measure how much people tolerate, feel unease, threatened and show anxiety to cope with ambiguous and unpredicted situation in the future. It is not same in each society as some shows risk averse behavior and others are risk takers. Societies with lower scores at UNC AVOI are China, India, Malaysia, Indonesia are comfortable with unseen situation. Lower score on index indicates about the abilities of their people to work in unpredicted circumstances, they can change their strategy in dynamic environment.

[Li et al. \(2013b\)](#) found aggressive risk-taking activities in countries where lower uncertainty is found. Countries with higher values on UNC AVOI, i.e., Japan, Italy, south Korea, Turkey, Italy, Pakistan and Spain with values above than 70 indicate these nations are working on set rules and policies, they avoid unpredictable circumstances as they have proper planning for their decisions, they strictly follow their plans and if they feel any uncertain situation, they try to avoid it ([Bae et al., 2012](#)). So, Financial gurus argue that these societies with higher values of UNC AVOI are more rule-oriented, does not accept changes easily and takes less risk ([Bae et al., 2012](#)). So, firms in this culture retain complete accounting disclosures, reducing the mortgagor's financial risk, making debt more attractive. [Kwok and Tadesse \(2006\)](#) also found that firms in culture of higher UNC AVOI rely more on debt from bank rather equity market. [Boubakri and Saffar \(2016\)](#); [Willeminck \(2018\)](#) have consist findings of positive relation between the UNC AVOI and leverage.

Opposite to these findings some scholars argues that nations with High value of UNC AVOI have more tendency of saving to face the unforeseen situations in future, (Shoham and Malul, 2012). According to revised Pecking order theory when people have more savings they use it at the time of need, as this capital is available at free of cost, second option is issuing equity which also does not increase the risk of firm, so in these countries firms will take lower debts from financial institutions. People do not like risky investment because debt can increase their bankruptcy chances, (Gleason et al., 2000; Arosa et al., 2014). From these arguments it can be concluded that countries with higher score of UNC AVOI prefer equity over debt. The managers in these countries distribute less cash as dividend to save the money for the unseen future requirements, Knight (1921); Fidrmuc and Jacob (2010); Zheng and Ashraf (2014); Kearney et al. (2012); Zheng et al. (2012); Mac an Bhaird and Lucey (2014); Wang and Esqueda (2014); Im et al. (2020) also found the inverse relation between UNC AVOI and leverage of the firm.

**Hypothesis 13.** There is a positive relationship between UNC AVOI and leverage.

### 2.2.3.3 Power Distance (PD)

Hofstede (2011) defined power distance as “the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally. All societies are unequal, but some are more unequal than others”. In these societies everyone accepts its position without any conflict, one can exert his dictatorial and paternalistic power due to his position in the society. PD is measured on index showing value from (100 to 1). Index value above 70 is considered high while countries with value under 40 is low. Countries on higher index score such as Malaysia (104), China (80), Indonesia (78) and India (77) shows more autocratic leadership. In these societies subordinates willingly follow their leaders respecting their status and tolerate the difference. Countries like Australia, Norway, Canada and USA etc. are considered democratic with open doors for discussion and making argument and people at top position are even answerable for their judgments to subordinates. Concentrating on corporate sector where

decisions are 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 these societies have autonomy, no open door of discussion is here so managers will be responsible for any outcome. to remain at the safer side managers will prefer to issue equity over debt. These nations with high score on PDI lack trustworthiness and have less or no sharing of information. Dyer and Chu (2003) argued where there is trustworthy situation and more sharing of information, transaction cost will be lower. Trade off theory explain inverse relation between transaction cost and leverage. Aggarwal and Goodell (2009); Zheng et al. (2012) have same findings that societies with higher values of PD have lower trust level so less disclosure of information increases the cost of debt which discourage the issuance of noncurrent liability.

Mac an Bhaird and Lucey (2014) explored that societies with higher power distance score have the culture of respect authority and hierarchy. Banks are considered more powerful as compared to firms, as these firm make request of loan from bank. Making request shows the mastery nature of the financial institutions, due to their strong position banks charge higher interest on provided loan, increasing the chances of bankruptcy for these firms. To avoid this worst situation managers, rely less on debt and prefer equity.

According to Chui et al. (2002) “mastery” dimension of Schwartz is same as PD in Hofstede dimensions and there is negative relation between mastery and debt. In favor of his argument Chui et al. (2002) argued that in culture of “mastery” managers are concerned about their own performance and success so they prefer lower level of debt in capital structure to avoid the chances of bankruptcy. Aggarwal and Goodell (2009); Zheng et al. (2012); Wang and Esqueda (2014); Boubakri and Saffar (2016); Willemink (2018) findings are consistent with trade off theory, agency and bankruptcy theory that lower information causes high transaction cost leading to more chances of bankruptcy, discouraging the firms to add more debt in their capital structure.

Summarizing the above all discussion from prior literature on power distance and leverage firms in culture of higher power distance have lower level of debt in its capital structure.



**Hypothesis 14.** There is a negative relationship between power distance and leverage.

#### 2.2.3.4 Individualism (IND) vs Collectivism

IND can be defined as degree to which people favor their own interest and 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 and de Oliveira, 2016). These people have loose ties with others, prefer their interests and success ignoring its effect in other people life. Contrast to IND, in collective societies individuals have strong relations, lives in groups, have strong family relation for whom they can scarify their own interests (Hofstede, 2011). Countries with value above 70 are considered more individualistic including Australia, U.S, U.K, New Zealand and Canada etc. while countries like Pakistan, Indonesia, Malaysia, Thailand, Turkey, etc. have value less than 40, show collectivism. Academician with finance background such as Gleason et al. (2000); Chui et al. (2002, 2010); Li et al. (2013a); Antonczyk and Salzmann (2014); Ashraf et al. (2016); Illiashenko (2019) found that managers in individual culture have tendency of autonomy and hedonism, manager dare challenges to show more success in their portfolio as they are optimist , overconfident about their abilities and also overvalue the equity and firm performance, At the same time they choose safer projects to have highest probability of success, for this reason they prefer to issue equity over debt.

Gleason et al. (2000) argue that in individualistic culture manager work for their own interest and are not willing to scarify their autonomous position so disliking the involvement of external financier they evade to include debt in capital structure. Agency cost theory explain this individualistic behavior in making choice of capital. Chui et al. (2016) argued that in countries where collectivism is high, managers and investors have less conflicts of interest and lower bankruptcy cost, so firms acquire more debt and vice versa. Mac an Bhaird and Lucey (2014) confirm this negative relation in SME's where to avoid the opposing penalties of financial distress, as it can harm owner's reputation and self-esteem, they do not take long term debts from banks. Contrary to these findings Fidrmuc and Jacob

(2010); Gray et al. (2013); Wang and Esqueda (2014); Boubakri and Saffar (2016); Willemink (2018) found positive relation between individualism and debt. They argued the 2nd aspect of individualistic culture, in favour of their findings they said that as more agency problems persist in individualistic culture, the interest of manager and shareholder are different. Both works to achieve their own target. Management takes benefit of their position, gain more loan even at higher cost to achieve their targets ignoring the cost of distress attached with high debt. They enjoy their success at cost of shareholders wealth. This creates positive relation between individualism and leverage.

**Hypothesis 15.** There is a positive relationship between individualism and leverage.

#### 2.2.3.5 Long-Term Orientation vs. Short-Term Orientation

This is the fifth dimension of Hofstede cultural insight, linking the past, analyzing the current situation and planning for the future of the nation. In this respect nations behaves differently. Countries with Short term orientation focus on past and present ignoring the importance of future, for these people their traditions, values, norms and social obligations are more important, remaining in their past they praise their old achievements, have short term planning as they want quick results, Have trend of more spending, enjoy leisure time, follow their customs, i.e. Australia, U.S.A, Thailand, South Africa, Canada and Finland are the countries with values lower than 40 on LTO index. According to Willemink (2018) firms in this culture might show less reluctance to acquire debt for speedy, short-term outcomes or to achieve rapid growth rate. Other cultures are future oriented focusing on the targets to be achieved in near and far future, they plan to achieve their goals ignoring the prosaically behavior of helping others specially if they have some common interests, persistent, no or less leisure time, save money and invest in business plans from where they get secure returns . Examples of these countries are South Korea, Tiwan, Japan, China and Germany having score above 80 on LTO.

Lian et al. (2017) confirm the above features of LTO culture that people in these societies avoid extra spending and save money for future. Ahunov and Van Hove

(2020) words have value here that people from LTO culture spend their time and money in gaining skills and financial knowledge to get higher returns on their investment to save for their future. In case of higher leverage firms return on investment become risky so managers in these principles prefer to use retained earnings for expansion and reinvestment. In LTO cultures, firms have higher profits due to strong and consistent planning and firm's with profitability have direct association with firm's value and lower leverage (Rajan and Zingales, 1995; Sheikh and Wang, 2011; Hovakimian and Li, 2011; Khan et al., 2016; Ke and Xiong, 2016). They also prefer long term investment which is equity (Lievenbrück and Schmid, 2014). In this context literature shows negative relation between LTO and leverage ((Zheng et al., 2012; Wang and Esqueda, 2014; Esparza et al., 2018; Willemink, 2018).

**Hypothesis 16.** There is a negative relationship between LTO and leverage

### 2.2.3.6 Indulgence vs Restraint (INDLG)

Comparatively new cultural dimension of Hofstede is Indulgence vs. restraint, "the extent to which individuals try to control their desires and impulses based on the way they were raised. It is relatively new dimension with values available for few countries. INDLG reveals the degree to which a society reacts to human basic needs. High values of INDLG means people in this society are optimist, enjoying their life, have fewer moral values feel happy and have healthier life. Countries like South Africa, Switzerland, Canada, U.S.A and Taiwan have higher values displaying the nature of people, which is full of life, not having self-control try to fulfill their desires by any way. Mackintosh (2013) also founds that people in high indulgent cultures are optimistic. With less self -control and optimistic nature they do not hesitate to take debt for satisfaction of their wants, (Zhang, 2020). This shows the positive relation between indulgence and leverage. Countries like Pakistan, Bangladesh, India, Italy and Indonesia have lower values on IVR index showing that people of these societies restrain from fulfilling wants, focus on needs, and give importance to moral values which show their relationship with traditions. Scholars such as Zheng et al. (2012); Wang and Esqueda (2014); Willemink (2018); Zhang (2020); Haq et al. (2018) found positive relation between Indulgence and

leverage. [Góis et al. \(2018\)](#) found the relation of IFRS and cost of equity with indulgence and found positive relation. In their finding they argued that the cost of equity capital tends to be low in countries with IFRS and long-term orientation.

**Hypothesis 17.** There is a positive relationship between Indulgence and leverage.

It is apparent from the above literature that no study in the past examines the impact of national culture on capital structure with firm specific, corporate governance and cultural dimensions. This study, for the first time, include a large number of company specific variables and corporate governance variables as control variables to analyze their effect of Hofstede national cultural dimensions around different regions of the world including Asia, Europe, Middle east, Africa, North America.s

# Chapter 3

## Research Methodology

### 3.1 Data and Sample

This study aims to find out the impact of culture on capital structure in presence of governance and firm specific variables. This chapter deals with the sampling processes, sources of Data, sampling period of data measurement of explanatory and explained variables and statistical models used for analysis.

#### 3.1.1 Sampling

Sample for this study consist of 7700 observations of 50 non-financial firms from 15 different countries each. Due to non-availability of some data few observations are eliminated and finally 6216 observations are used for data analysis. To increase the economical, geographical and cultural exposure of the study countries from five (5) different continents such as Asia, Europe, Middle east, Africa, North America, are selected from both emerging and developed economies.

The following approaches have been used for sampling of countries and firms.

#### 3.1.2 Sampling of Countries

Sample of Particular countries is randomly selected from the above regions keeping in view that data can be categorized in to two following groups..

- 1) Developed
- 2) Emerging

Developed and emerging countries are defined by S&P DJI defines as:

1. Countries depicting higher level of consistency in their policies, are most supportive and accessible to overseas investors are characterized as ‘Developed countries’.
2. Countries which show relatively less accessibility but have some degree of openness for foreign investors are termed as ‘Emerging country.’

For current study, 15 countries representing both groups are selected. Sample countries include Pakistan, India, Bangladesh, Indonesia, Sirilanka, Thailand, Japan, Turkey, South Africa, Italy, Finland, Spain, Canada, Norway and Qatar.

### **3.1.3 Sample From Developed Economies**

Developed countries includes:

- Japan
- Italy
- Finland
- Qatar
- Canada
- Spain
- Norway
- Turkey

(In Human development Index HDI 2022 Turkey is included in the list of Developed countries as its value in HDI is 0.82)

In this group some developed countries like China, US and UK, Australia is ignored due to following reasons:

1. Chinese economy is closed with most socialist society which is not aligned with other countries of the sample.
2. In representation of Europe, U. K was ignored for this study to capture European culture through other countries of the European Union, as few studies are available for the other European nations selected for current study as compare to U.K.. U.K culture have similarity with European countries being part of European Union till 2020, so results of other European countries can be generalized for U.K.
3. U.S and Canada have same geographical location with identical culture, as fewer prior research work has been observed during literature review process on Canada as compare to U.S so, Canada was preferred to be explored as compare to U.S. Due to similarity in culture Canadian results can be generalized for U.S.

### **3.1.4 Sample From Emerging Economies**

Emerging countries includes:

- India
- Pakistan
- Indonesia
- Bangladesh
- South Africa
- Sri Lanka
- Thailand

### **3.1.5 Sampling of Firms**

As the purpose of study is to explore the impact of national culture on capital structure, for this purpose larger organization with diverse nature of corporate

governance is required for current study. Selection criteria for firms is the top 50 companies with respect to highest market capitalization in year 2016 in each specific country included in the sample. Reason for choosing these highest market capitalized firms is larger business usually have more diversified board in term of size, gender, independence and foreign directors, who can show more significant effect on capital structure.

## 3.2 Data Collection

Population of firms aims at to take the top 50 non-financial companies of the country with respect to highest market capitalization in the year 2016. Non-financial firms are immensely different from the financial one in terms of their business activities. The primary objectives of the non-financial firm are the production of goods and services and are considered an important, considerable and stable segment of any economy.

Company's financial Data have been collected from DataStream Database for the period of 11 years (2006-2016). Data related to corporate Governance has been collected from yearly financial statements of the companies. Governance data had some limitations such as data of Dual position of CEO as Chairman, foreign directors and independent directors is not available for Indonesia, Sirilanka, Thailand, south Africa, Japan and Qatar. So, data was explored in four (4) different stings.

1. In 1st set of data all sampled countries with commonly available governance variable such as board size, CEO duality and number of female directors, six Hofstede's cultural dimensions and firm specific variables are regressed in panel data.
2. In 2nd data set all those countries in the sample for which complete set of governance variables such as, dual position of CEO as Chairman, Independent Directors and Foreign Director is available, used in regression.
3. In 3rd data set data is divided in to two groups Developed vs Emerging and keeping in mind the maximum available governance variables countries are



selected. Purpose of this analysis is to investigate either culture effect in same or the other way in different economies of the world.

4. In 4th data set data is divided in to two groups Asia and Europe and keeping in mind the maximum available governance variables countries are selected. Through this analysis it is explored that culture effect is same or varies in different regions of the world.

For this study, Hofstede (1984, 2001)'s cultural dimensions are used to quantify the national culture. Scores for each cultural dimension have been obtained from [www.hofstede-insights.com](http://www.hofstede-insights.com). Score of these cultural dimensions are normally used for various economic and financial purposes. Further, values on national culture are obtainable for a wider set of countries.

To this study firm specific variables, Governance related variables and cultural scores of Hofstede cultural dimension have been taken as independent variables.

### **3.3 Variable Description**

This section defines the details of dependent, independent, and control variables.

#### **3.3.1 Measurement of Firms' Specific Variables**

Various firm specific variables are found in literature related to selection of capital. For this study determinants like liquidity, tangibility, Profitability, size of firm and growth has been taken as independent variables. Lag of dependent variable Leverage is also included in the study as independent variable. For firm related variables, this study uses Thomson Reuters DataStream database to create the sample of 6216 transactions of unbalanced data set of 750 companies from 15 countries of the world.

Highest market capitalization in the year of 2016 and availability of data in Thomson Reuters DataStream database is the selection criteria for organizations across the period 2006-2016. For analysis purpose only public limited firms have been taken in the sample as these firms have more availability of data. Firms'

specific variable under consideration are defined by Thomson Reuters DataStream database as:

### (i) Measurement of Leverage

Leverage is defined as long-term debt having maturity of 12 months or more than that. In earlier studies scholars [Booth et al. \(2001\)](#); [Antoniou et al. \(2002\)](#); [De Jong et al. \(2011\)](#); [Demirgüç-Kunt and Levine \(2004\)](#); [Titman and Wessels \(1988\)](#); [Rajan and Zingales \(1995\)](#); [Bhattacharjee and Dash \(2021\)](#); [Panda and Nanda \(2020\)](#) used long term leverage determinant as book value of long-term debt scaled by market value of total assets. [Titman and Wessels \(1988\)](#) suggests at least six proxies to calculate financial leverage. One of these six is long term debt scaled by either market or book value of equity separately. For current research ‘Debt to total asset ratio’ is used as measure of leverage. Values of long-term debt are taken from data stream database to calculate this ratio. A debt is defined as long-term having maturity of 12 months or more than that.

$$Leverage\ Ratio_{i,t} = \frac{Long\ Term\ Debt_{i,t}}{Total\ Assets_{i,t}} \quad (3.1)$$

Here Lag of leverage Lev (-1) is used as independent variable.

### (ii) Measurement of Liquidity

The ability of a firm to meet its short-term obligations from its current assets is defined as liquidity. To check the effect of liquidity on leverage current ratio is used. A few prior studies [Antoniou et al. \(2002\)](#); [Deesomsak et al. \(2004\)](#); [De Jong et al. \(2011\)](#); [Niu \(2008\)](#); [Handoo and Sharma \(2014\)](#); [Karacaer et al. \(2019\)](#) used Current ratio to measure liquidity of firms. current ratio is defined as:

$$Cur\_Ratio_{i,t} = \frac{Current\ Assets_{i,t}}{Current\ Liabilities_{i,t}} \quad (3.2)$$

It is the ability of a firm to meet its short-term obligations from its current assets.

### (iii) Tangibility

Tangibility (TANG) is defined as the ratio of property, plant and equipment to total assets. Many prior studies [Bevan and Danbolt \(2002\)](#); [De Jong et al. \(2011\)](#);

Fan et al. (2012); Frank and Goyal (2009); Fan et al. (2012); Harris and Raviv (1991); Handoo and Sharma (2014); Kayo and Kimura (2011); Karacaer et al. (2019); Öztekin (2015); Michaelas et al. (1999); Rajan and Zingales (1995); Niu (2008); Akhtar and Oliver (2009); Nguyen and Ramachandran (2006); Al-Najjar and Kilincarslan (2018); Feidakis and Rovolis (2007); Giannetti (2003) used the ratio of Non-current assets to total assets as tangibility measure in their study, so this version of Tangibility is used here for current research purpose.

$$Tangibility_{i,t} = \frac{BVofProperty, Plant \& Equipment_{i,t}}{BVofTotal Assets_{i,t}} \quad (3.3)$$

#### (iv) Measurement of the Size

In prior studies various scholars such as Astakhov et al. (2019) used natural log of market capitalization as proxy of the size of business. Market capitalization is determined by multiplying the outstanding number of shares held by company with its current market price, so it talks about the total market value of the firm's outstanding shares.

$$Market Capitalization_{i,t} = MPS_{I,t} \times TNOS_{I,t} \quad (3.4.1)$$

Whereas, MPS refers to current market price per share, TNOS refer to total number of outstanding shares.

$$Size(firm)_{i,t} = \ln(\text{market capitalization})_{i,t} \quad (3.4.2)$$

By using log, distribution is more likely to perform like Normal distribution and therefore support better regression analysis. Size of business also have importance in study as it is the base of sampling, 50 firms with highest market capitalization in year 2016 in sampled countries are selected for the purpose of this study.

#### (v) Measurement of Growth

Different proxies of growth are used by financial scholars but specific to this study market to book value has been used to find out the growth of the firm. Significant number of earlier studies Bevan and Danbolt (2002); De Jong et al. (2011); Lemmon et al. (2008); Fan et al. (2012); Gaud et al. (2005); Deesomsak et al. (2004);

Kayo and Kimura (2011); Lemmon et al. (2008); Niu (2008); Ozkan (2001); Öztekin (2015); Rajan and Zingales (1995); Frank and Goyal (2009); Yang et al. (2015) used market to book value of equity as proxy to measure the growth of firm.

$$Growth_{I,t} = \frac{Market\ Capitalization_{i,t}}{Book\ Value_{i,t}} \quad (3.5a)$$

Market value of the firm is the market capitalization of the firm (formula given in 3.5a)

$$Book\ value_{i,t} = total\ shareholder\ equity_{I,t} - preferred\ share\ holder\ equity_{I,t} \quad (3.5b)$$

#### (vi) Measurement of Profitability

Titman and Wessels (1988) used operating profit to total assets and total sales to determine profitability. Operating profit (Profit before interest and taxes, PBIT) to total assets as a measuring proxy of firm's profitability has been used by numerous earlier researches (Fama and French, 2002; De Jong et al., 2011; Niu, 2008; Karacaer et al., 2019; Handoo and Sharma, 2014). After the prevailing literature, this study also uses firms' earnings before interest and tax (EBIT) scaled by firm's total assets (TA) to assess profitability of firms.

$$PROF_{i,t} = \frac{EBIT_{i,t}}{BV\ of\ Total\ Assets_{i,t}} \quad (3.6)$$

### 3.3.2 Corporate Governance Variables

In literature various corporate governance variables have been used to find out the effect of governance on leverage such as managerial ownership, Institutional ownership, CEO duality, gender diversity, board size, outside directors, foreign directors, Audit committee Independence and many more are used but for the purpose of this study data of governance variables directly affected by culture of their origin and affecting the decision of capital structure is collected. These variables include Board size, CEO duality as Directo, CEO Duality as Chairman,

Representation of Female directors, Number of independent directors and Presence of foreign director.

These variables can be defined as.

**(i) Board Size**

Board size can be defined as the total number of directors on the governance board of all sample firms for each accounting year, this is inclusive of the CEO and Chairman. This board includes outside and foreign director's, executive and non-executive directors.

$$Board\ size_{i,t} = Total\ Number\ of\ Directors\ on\ the\ Board_{i,t} \quad (3.7)$$

Board Size include both Executive, Non-Executive directors on board.

**(ii) Female Representation in the Board** To calculate this variable, number of female directors for sample firms have been taken from the financial statements of the companies for each specific year of the sample period.

$$Female_{i,t} = Total\ Number\ of\ Female\ Directors\ in\ the\ Board_{i,t} \quad (3.8)$$

**(iii) CEO as Chairman**

It refers to the position of CEO and chairman held by same member. To measure this variable dummy variable 0 and 1 have been used. 1 shows the dual position of CEO and chairperson held by same member, while 0 shows absence of dual position.

$$CEO\ as\ Chairman_{i,t} = (Dual\ Position\ of\ chairman)_{i,t} \quad (3.9)$$

**(iv) CEO as Director**

To measure this variable dummy of 0 and 1 have been used, 0 represents absence of CEO as director while 1 shows the presence of CEO as director. Data of this variable has been collected from the annual financial statements of the sample firms for the specific years of selected period 2006-2016.

$$CEO\_Director_{i,t} = (Dual\ Position\ of\ CEO)_{i,t} \quad (3.10)$$

#### (v) Independent Directors (INDP DIR)

An outside or independent director is a member of board who does not have any material or financial association with corporation or related individuals, except their remuneration. To measure this variable number of total outside directors have been collected from the annual financial statements of the sample firms for the specific years of selected period 2006-2016.

$$INDP\ DIR_{i,t} = (Total\ Number\ of\ Outside\ Director\ on\ the\ Board)_{i,t} \quad (3.11)$$

#### (vi) Foreign Directors (FRGN DIR)

It represents the presences of non-native directors belonging from other nations. This variable is measured in terms of dummy variables, 0 represents absence and 1 represent the presence of foreign directors.

$$FRGN\ DIR_{i,t} = (Total\ number\ of\ Non - Native\ Director\ on\ The\ Board)_{i,t} \quad (3.12)$$

### 3.3.3 Cultural Dimension

Geert Hofstede directed a very broad study to estimate the scores of cultural dimensions around 76 countries. His study is based on cultural values in workplace. Hofstede presented six national culture dimensions giving independent inclination for different nations which differentiate one country from the other; that is why, scores of all countries show comparative positions of cultural dimensions.

#### (i) Masculinity vs Femininity (MAS)

In masculine society the role of gender is distinctive. Masculinity stresses on desire, heroism achievement, attaining wealth, discriminated gender roles and material

rewards for success. Opposite to this, feminist societies prefer equality, harmony, feelings of caring and sharing for others. Higher values of this Hofstede's cultural dimension on values index represents the masculine traits in the society and vice versa.

**(ii) Uncertainty Avoidance (UNC AVOI)**

This shows the tendency of the society to cope with uncertain and ambiguous situations. Higher value of this variable on cultural values index represents the willingness of individuals to accept the undefined situations easily, it does not create anxiety among them and show their curious nature and willingness to follow rules and law set by the society. Weaker the score of this dimension less willing are people to follow rules and law and are uncomfortable with the new and undefined situations.

**(iii) Power Distance (PD)**

Power distance means how much the societies accept discrimination among the people holding power and their subordinates. Cultures with higher values on power distance index shows more inequality between hierarchical relationships. Subordinates accepts supremacy of the individual at the higher rank and the people at top in hierarchy expects from juniors to obey their orders or advice. Greater scores in this dimension shows that individuals in the country accept higher power distance and vice versa.

**(iv) Individualism vs Collectivism (IND)**

Individualistic society's shows loose connection among groups and focus on their personal traits, achievements and show care for themselves and immediate families. Opposite to this collectivistic culture shows unity and selflessness, more focus on group achievements and show loyalty for each other. Higher values of this variable on cultural values index shows more tendency of individualism and lower values represent collectivism.

**(v) Long Term Orientation VS Short Term Orientation (LTO)**

Societies with higher score on above mentioned dimension depicts their tendency to give importance to future and plan for upcoming achievements, express willingness to learn modern education and new technology and use it for the betterment of

society. Lower values for this specific dimension points toward the narrow thinking of the individuals who gives importance to their traditions and past achievements and show resistance to accept new thoughts and skills.

#### **(vi) Indulgence vs. Restraint (INDLG)**

Indulgence can be measured by a degree to which a society accepts socialization and permits relatively free inclination of basic and natural human desires related to relishing and having fun in leisure time. Higher score of this variable on cultural insight represent indulgence while lower score countries shows restrain behavior which means cynicism and pessimism behavior of the society, giving no importance to their desire due to following strict norms of the society.

### **3.4 Methodology**

#### **3.4.1 Significance of Panel Data Analysis**

The data for the study is based on culture, corporate governance and firm specific variable. Firm specific variables are collected for 6216 unbalanced data from 750 companies of 15 countries of the world over period of 11 years from 2006 to 2016, it is known as panel data or longitudinal data as it contains time series as well as cross-sectional dimension. The cross-section data contains observations collected for number of firms at a single point of time. In the time series, data is measured for same firm over a time interval or for different number of years. Use of panel data in research has significantly risen due to availability of data, need to examine intricate human behavior and tricky methodology ([Hsiao, 1985](#)).

Panel data analysis have advantages over cross section data or time series data, as it reduces the problems of endogeneity and multi collinearity in data. It is also useful to analyze large and complex models. This is so because cross section analyses data of firms for a single time, whereas panel data provides analysis of firms or individuals over time ([Wooldridge, 2002](#)). Thus, panel data has supremacy over cross section or time series data regarding provision of useful Information to the decision makers.



The advantages defined by Baltagi and Li (1995); Wooldridge (2002) are given as under:

- Panel data Control unobserved firm characteristics, thus permitting conclusion to be drawn from heterogeneous samples.
- This type of data also provides a more information's with more variability, minimum level of collinearity between the variables, more degrees of freedom and more efficiency in terms of (S.E) standard error of co-efficient.
- It Enables the measuring of those factors which may not be predicted in pure cross sectional or time series data such as with panel data lags of variables can be measured that could not be observed in cross-sectional data

It Permits the analysis of behavioral models while avoiding biases that result from the aggregation of firms or individuals. Although through panel data in-depth analysis is possible but it also requires more sophisticated modelling techniques. As there are various observations for each firm, these observations are not fully independent from each other so there is likely correlation between the error terms. This is controlled for in the statistical analysis.

### 3.4.2 Model Specification

This research works on panel data models to empirically explore the association between leverage and cultural dimensions in presence of firms' specific and governance variables.

At first it is aimed to investigate that culture of the specific country affects significantly on the capital decision of the firm or not. For this purpose, data for all selected variables of governance is not available for all sampled countries. So, in 1st section all sampled countries cultural dimensions, firm specific variables and available governance variables for complete sample are regressed in panel data. In 2nd section selecting all those countries in the sample for which complete set of governance variables such as, dual position of CEO as Director, Independent Directors and Foreign Director is available, are used in regression. After this it will

be analyzed that these cultural variables affects in same way across different economical and geographical areas of the world or vice versa. For this purpose, data of sampled countries is also classified between:

(1) developed and Emerging (2) Asia and Europe.

Various earlier empirical studies on “cultural Finance” also used the OLS regression in panel data [Farooq et al. \(2020\)](#); [Aftab et al. \(2018\)](#). To investigate effect of firm specific and corporate governance variables and dimensions of culture this study also operates EGLS and GMM methodology. EGLS technique is used to solve the question of heteroscedasticity or auto-correlation. This method also gives better results and more significance most of time.

### 3.5 Impact of Cultural Dimensions on Capital Structure

This segment of the study examines how various firm specific variables, National Governance Variables and culture of the country affect the capital structure of the firm. The commonly used form of the association between these factors and capital structure is as under:

$$\text{Leverage} = f(\text{Culture}, \text{CorporateGovernance}, \text{FirmSpecificVariable})$$

Culture includes [Hofstede \(1984, 2001\)](#) cultural dimensions of Masculinity(MAS), Uncertainty avoidance index (UNC AVOI), Individualism(IND), Power distance index (PD), Long term orientation (LTO) and Indulgence(INDLG).Corporate governance determinants included in this study are; Board Size, Chairman as CEO, CEO as Director, Number of Female Directors, Number of Independent Directors and Foreign Directors .Firm specific determinants of capital structure included in this research are; liquidity, tangibility, profitability, size of firm and growth.

#### 3.5.1 Empirical Models

As stated, the objective of the study has three folds. Firstly, the current research

investigates the impact of cultural of the specific country on the capital structure, for this purpose samples data is regressed in two ways. Sample of all countries (including complete set of data) and sample of all variables (including complete set of firm, governance and cultural variable sampled for this study). Secondly, this study explores that either developed or emerging economies react to culture in same way or not. Finally, to examine the geographical effect, sample countries have been divided in Asian and European groups and impact of culture on capital decision have been explored.

Therefore, regression models are designed based on the study's objectives. As the current study uses panel data, dependent variable leverage has been regressed with its lag (lev -1), as the independent variable in the model, it can arise the issue of endogeneity. In panel data studies to overcome this issue of endogeneity GMM is used. Secondly, cultural dimension value is constant over a country for all year and some groups such as countries in Asia or Europe have resemblance in culture so there Hofstede dimensions value can create the problem of autocorrelation and heteroscedasticity, to overcome this issue EGLS technique is used in the study. So, this study is based on GMM and EGLS techniques. These simulations are carefully chosen as they are considered more appropriate for the panel data to determine the relationship among the selected variables.

### **Regression Model to Measure the Impact of Cultural Dimensions on Capital Structure of the firm (For All countries)**

In this segment, effect of firm specific variables for all countries has been examined through following equation.

$$\begin{aligned}
 LVG_{i,t} = & \beta_0 + \beta_1 LVG(-1)_{i,t} + \beta_2 CUR_{i,t} + \beta_3 TANGIBILITY_{i,t} \\
 & + \beta_4 PROFITABILITY_{i,t} + \beta_5 LS_{i,t} + \beta_6 GROWTH_{i,t} + \mu_{i,t} \quad (3.13)
 \end{aligned}$$

To explore the relation of corporate governance variable on capital structure following equation has been used;

$$\begin{aligned}
LVG_{i,t} = & \beta_0 + \beta_1 LEV(-1)_{i,t} + \beta_2 CUR_{i,t} + \beta_3 TANG_{i,t} + \beta_4 PROF_{i,t} + \beta_5 LS_{i,t} \\
& + \beta_6 GROWTH_{i,t} + \mu_{i,t}
\end{aligned} \tag{3.14}$$

To study the findings of cultural dimension of Hofstede on capital structure in presence of firm and CG variables following equation has been used;

$$\begin{aligned}
LVG_{i,t} = & \beta_0 + \beta_1 LEV(-1)_{i,t} + \beta_2 CUR_{i,t} + \beta_3 TANG_{i,t} + \beta_4 PROF_{i,t} + \beta_5 LS_{i,t} \\
& + \beta_6 GROWTH_{i,t} + \beta_7 BSZ_{i,t} + \beta_8 DIR\_CEO_{i,t} + \beta_9 Female_{i,t} + \beta_{10} MAS_{i,t} \\
& + \beta_{11} UNC\_AVOI_{i,t} + \beta_{12} IND_{i,t} + \beta_{13} PD_{i,t} + \beta_{14} LTO_{i,t} + \beta_{15} INDLG_{i,t} + \mu_{i,t}
\end{aligned} \tag{3.15}$$

### **Regression Model to Measure the Impact of Cultural Dimensions on Capital Structure of the firm (For All Variables)**

Effect of firm specific variables for all CG variable group has been examined through equation 3.13.

To explore the relation of corporate governance variable on capital structure following equation has been used;

$$\begin{aligned}
LVG_{i,t} = & \beta_0 + \beta_1 LEV(-1)_{i,t} + \beta_2 CUR_{i,t} + \beta_3 TANG_{i,t} + \beta_4 PROF_{i,t} + \beta_5 LS_{i,t} \\
& + \beta_6 GROWTH_{i,t} + \mu_{i,t}
\end{aligned} \tag{3.16}$$

To observe the relation of cultural dimension of Hofstede on capital structure in presence of firm and CG variables following equation has been used;

$$\begin{aligned}
LVG_{i,t} = & \beta_0 + \beta_1 LEV(-1)_{i,t} + \beta_2 CUR_{i,t} + \beta_3 TANG_{i,t} + \beta_4 PROF_{i,t} + \beta_5 LS_{i,t} + \\
& \beta_6 GROWTH_{i,t} + \beta_7 BSZ_{i,t} + \beta_8 Chair\_CEO_{i,t} + \beta_9 DIR\_CEO_{i,t} + \beta_{10} Female_{i,t} \\
& + \beta_{11} FEMALE\_PRESENCE_{i,t} + \beta_{12} INDP\_DIR_{i,t} + \beta_{13} FRGN\_DIR_{i,t} + \mu_{i,t}
\end{aligned} \tag{3.17}$$

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

Effect of firm specific variables for developed vs Emerging groups variable has been observed through equation 3.13. To explore the relation of corporate governance variable on capital structure of Developed vs Emerging countries group following equation has been used;

$$\begin{aligned}
LVG_{i,t} = & \beta_0 + \beta_1 LEV(-1)_{i,t} + \beta_2 CUR_{i,t} + \beta_3 TANG_{i,t} + \beta_4 PROF_{i,t} + \beta_5 LS_{i,t} \\
& + \beta_6 GROWTH_{i,t} + \beta_7 BSZ_{i,t} + \beta_8 Female_{i,t} + \beta_9 INDP\_DIR_{i,t} + \mu_{i,t}
\end{aligned} \tag{3.18}$$

To observe the relation of cultural dimension of Hofstede on capital structure in presence of firm and CG variables following equation has been used;

$$\begin{aligned}
LVG_{i,t} = & \beta_0 + \beta_1 LEV(-1)_{i,t} + \beta_2 CUR_{i,t} + \beta_3 TANG_{i,t} + \beta_4 PROF_{i,t} + \beta_5 LS_{i,t} \\
& + \beta_6 GROWTH_{i,t} + \beta_7 BSZ_{i,t} + \beta_8 Female_{i,t} + \beta_{12} INDP\_DIR_{i,t} \\
& + \beta_{10} MAS_{i,t} + \beta_{11} UNC\_AVOI_{i,t} + \beta_{12} IND_{i,t} + \beta_{13} PD_{i,t} + \beta_{14} LTO_{i,t} + \mu_{i,t}
\end{aligned} \tag{3.19}$$

These equations will also be used to examine the impact of culture on capital structure in separate groups of developed and emerging countries.

### Regression Model to Measure the Impact of Cultural Dimensions on Capital Structure of the firm in Asia and Europe

In this segment effect of firm specific variables for Asian and European countries has been examined through following equation

$$\begin{aligned}
LVG_{i,t} = & \beta_0 + \beta_1 LEV(-1)_{ASIA(i,t)} + \beta_2 LEV(-1)_{EUR(i,t)} + \beta_3 CUR_{ASIA(i,t)} \\
& + \beta_4 CUR_{EUR(i,t)} + \beta_5 TANG_{ASIA(i,t)} + \beta_6 TANG_{EUR(i,t)} + \beta_7 PROF_{ASIA(i,t)} \\
& + \beta_8 PROF_{EUR(i,t)} + \beta_9 LS_{ASIA(i,t)} + \beta_{10} LS_{EUR(i,t)} + \beta_{11} GROWTH_{ASIA(i,t)} \\
& + \beta_{12} GROWTH_{EUR(i,t)} + \mu_{i,t}
\end{aligned} \tag{3.20}$$

To explore the relation of corporate governance variable on capital structure of Asian and European countries group following equation has been used;

$$\begin{aligned}
LVG_{i,t} = & \beta_0 + \beta_1 LEV(-1)_{ASIA(i,t)} + \beta_2 LEV(-1)_{EUR(i,t)} + \beta_3 CUR_{ASIA(i,t)} \\
& + \beta_4 CUR_{EUR(i,t)} + \beta_5 TANG_{ASIA(i,t)} + \beta_6 TANG_{EUR(i,t)} + \beta_7 PROF_{ASIA(i,t)} \\
& + \beta_8 PROF_{EUR(i,t)} + \beta_9 LS_{EUR(i,t)} + \beta_{10} LS_{EUR(i,t)} + \beta_{11} GROWTH_{ASIA(i,t)} \\
& + \beta_{12} GROWTH_{EUR(i,t)} + \beta_{13} BSZ_{ASIA(i,t)} + \beta_{14} BSZ_{EUR(i,t)} + \\
& \beta_{15} Chair\_CEO_{ASIA(i,t)} + \beta_{16} Chair\_CEO_{EUR(i,t)} + \beta_{17} DIR\_CEO_{ASIA(i,t)} + \\
& \beta_{18} DIR\_CEO_{EUR(i,t)} + \beta_{19} Female_{ASIA(i,t)} + \beta_{20} Female_{EUR(i,t)} + \\
& \beta_{21} FEMALE\_PRESENCE_{ASIA(i,t)} + \beta_{22} FEMALE\_PRESENCE_{EUR(i,t)} + \\
& \beta_{23} INDP\_DIR_{ASIA(i,t)} + \beta_{24} INDP\_DIR_{EUR(i,t)} + \beta_{25} FRGN\_DIR_{ASIA(i,t)} \\
& + \beta_{26} FRGN\_DIR_{EUR(i,t)} + \mu_{i,t}
\end{aligned} \tag{3.21}$$

To observe the relation of cultural dimension of Hofstede on capital structure in presence of firm and CG variables following equation has been used; In this equation basically two sets of data (Asia and Europe) are regressed simultaneously so it's coefficients are one for Asia and other for Europe .

$$\begin{aligned}
LVG_{i,t} = & \beta_0 + \beta_1 LEV(-1)_{ASIA(i,t)} + \beta_2 LEV(-1)_{EUR(i,t)} + \beta_3 CUR_{ASIA(i,t)} \\
& + \beta_4 CUR_{EUR(i,t)} + \beta_5 TANG_{ASIA(i,t)} + \beta_6 TANG_{EUR(i,t)} + \beta_7 PROF_{ASIA(i,t)} \\
& + \beta_8 PROF_{EUR(i,t)} + \beta_9 LS_{EUR(i,t)} + \beta_{10} LS_{EUR(i,t)} + \beta_{11} GROWTH_{ASIA(i,t)} \\
& + \beta_{12} GROWTH_{EUR(i,t)} + \beta_{13} BSZ_{ASIA(i,t)} + \beta_{14} BSZ_{EUR(i,t)} + \\
& \beta_{15} Chair\_CEO_{ASIA(i,t)} + \beta_{16} Chair\_CEO_{EUR(i,t)} + \beta_{17} DIR\_CEO_{ASIA(i,t)} + \\
& \beta_{18} DIR\_CEO_{EUR(i,t)} + \beta_{19} Female_{ASIA(i,t)} + \beta_{20} Female_{EUR(i,t)} + \\
& \beta_{21} FEMALE\_PRESENCE_{ASIA(i,t)} + \beta_{22} FEMALE\_PRESENCE_{EUR(i,t)} + \\
& \beta_{23} INDP\_DIR_{ASIA(i,t)} + \beta_{24} INDP\_DIR_{EUR(i,t)} + \beta_{25} FRGN\_DIR_{ASIA(i,t)} + \\
& \beta_{26} FRGN\_DIR_{EUR(i,t)} + \beta_{27} MAS_{ASIA(i,t)} + \beta_{28} MAS_{EUR(i,t)} + \\
& \beta_{29} UNC\_AVOI_{ASIA(i,t)} + \beta_{30} UNC\_AVOI_{ASIA(i,t)} + \beta_{31} IND_{ASIA(i,t)} + \\
& \beta_{32} IND_{EUR(i,t)} + \beta_{33} PD_{ASIA(i,t)} + \beta_{34} PD_{EUR(i,t)} + \beta_{35} LTO_{ASIA(i,t)} \\
& + \beta_{36} LTO_{EUR(i,t)} + \beta_{37} INDLG_{ASIA(i,t)} + \beta_{38} INDLG_{EUR(i,t)} + \mu_{i,t} \quad (3.22)
\end{aligned}$$

# Chapter 4

## Results

### 4.1 Methodological Framework

This study is further processed to get comprehensive understanding about the impact of culture on capital. For this purpose, data is explored into four (4) different sections.

#### 4.1.1 Complete Sample (for 15 countries)

In the 1st section whole sampled countries, company specific variables, all cultural dimensions and governance variables has been regressed with dependent variable (leverage). As different variables of CG data have limitations of availability for different countries, so data for governance variables is available for all sample countries on three determinants including Board size (BSZ, dual position of director as CEO (Dir\_CEO) and number of female directors (Female). In first setting of Data culture effect has been analyzed on common governance variables of all countries

#### 4.1.2 Sample Containing All Governance Variables

To explore the in-depth effect of governance, in 2nd section more governance variables such Chairman as CEO, Presence or absence of Female Director, Independent directors (INDP DIR) and foreign directors (FRGN DIR) .So in 2nd set of data board Size, CEO as DIR, Chairman as CEO (Chair\_CEO), Number of Female



Directors, Presence or absence of Female Director, Independent directors (INDP DIR) and foreign directors (FRGN DIR) are also included in the regression, Sample under study includes some countries whose limited governance variables are available such as values for independent directors, foreign directors and Chair\_CEO are not present. So, these countries are excluded in the 2nd set of Data.

### **4.1.3 Developed and Emerging Countries**

Around the globe, countries have different rate of economic growth, some are considered developed with advanced economies, better standards of living and innovative infrastructure. While on the other side emerging countries have developing manufacturing bases with more fundamental infrastructure; To explore the impact of culture in these two levels of economies data is categorized in Developed and Emerging Economies.

### **4.1.4 Asian and European Countries**

Lastly, to investigate the effect of culture in different geographical areas sampled countries are grouped in Asia and Europe. In last section, the impact of culture on capital structure is studied in Asia and Europe and explored that culture effects in same way or the other in different geographical locations.

## **4.2 Empirical Results**

### **4.2.1 Descriptive Summary and Correlation Matrix for Overall Sample**

In the following section it will be discussed that how different firm's specific variables, governance variables and culture dimensions of Hofstede effects the capital decision of the firm. The common form of the association between different factors and leverage is as under:

Leverage = f (Firm Specific Variable, Corporate Governance variable, Cultural dimensions)

Firm specific variables include leverage (-1), current ratio, growth, natural log of assets, tangibility and profitability. Corporate governance variables include board size (BSZ), dual position of CEO as directors (DIR\_CEO) and number of females in management (Female) in a specific year:

Cultural dimensions include Hofstede (1984, 2001) dimensions of Masculinity (MAS), Uncertainty avoidance index (UNC\_AVOI), Individuality (IND), power Distance (PD), Long-term orientation (LTO) and indulgence (INDLG)

Descriptive statistics (Table 4.1) shows the statistical behavior of the independent variables of firms for all sampled countries. Descriptive statistics consist of mean, median, Minimum and Maximum values and standard deviation of all variables. Mean and median values express the central point of data while Standard deviation indicates the variation and dispersion in data set. Minimum and Maximum values give information about the range of the given data.

TABLE 4.1: Descriptive Statistics for Overall Sample

	Mean	Median	Maximum	Minimum	Std.dev
<b>CUR_RATIO</b>	1.6176	1.2900	10.5400	0.1400	1.1019
<b>PROFITABILITY</b>	0.1056	0.0855	7.4537	-4.0217	0.2532
<b>TANGIBILITY</b>	0.3892	0.3690	0.9946	0.0100	0.2386
<b>LS</b>	7.2058	7.0474	11.6488	0.6894	1.2760
<b>GROWTH</b>	3.3722	2.0800	54.6400	0.0500	6.7925
<b>BSZ</b>	9.3496	9.0000	21.0000	2.0000	3.2707
<b>DIR_CEO</b>	0.5544	1.0000	1.0000	0.0000	0.5287
<b>FEMALE</b>	1.0093	1.0000	6.0000	0.0000	1.1950
<b>MAS</b>	48.0078	50.0000	95.0000	8.0000	21.6117
<b>UNC_AVOI</b>	62.9317	60.0000	92.0000	40.0000	16.7133
<b>IND</b>	44.8770	46.0000	80.0000	14.0000	21.8114
<b>PD</b>	59.1163	57.0000	93.0000	31.0000	16.5509
<b>LTO</b>	47.3307	46.0000	88.0000	0.0000	16.5728
<b>INDLG</b>	36.8674	42.0000	68.0000	0.0000	21.4724

Table 4.1 shows that the Average value of liquidity (current ratio) for 6277 firms across the whole sample is 1.6176 and median 1.29 while the maximum and minimum value of the said variable is 10.54 and 0.14, respectively. The standard deviation value for this variable is 1.109. Higher values at maximum point shows that firms prefer to have more current asset as compared to current liabilities which help them in taking loans from financial institutions. Mean value shows that on

average sample firms have strong ability to pay their short-term liabilities and are easily able to pay their short-term commitments as described in the mean value of around 1.6176. The standard deviation value is quite higher i.e., approximately 1.109 as it is somehow approaching to the mean value of working capital/current ratio. In calculation, a wider range exists between the maximum and minimum values of current ratio, signifying that one of the sample firms has extremely low capacity to pay their short-term obligations while another extreme of maximum value shows that one firm has around 10.5 times capacity to pay its short-term responsibilities.

The mean value of profitability (PBIT/total Assets) for the whole sample of 6277 firms across 15 countries is 0.1056 means 10.56% approximately with median 0.0855. The maximum level of profitability of the given data 7.4538 or 745.38% shows that some firms in the data generate earnings of 745.38% on the investment made by shareholders, which will increase the trust of stockholders as well as debt holders and it makes easier for firms to acquire more funds at lower cost because of their strong bargaining power with the fund providers, minimum value is (-4.0217) shows the firm in given sample is in loss. Standard deviation value 0.2532 is greater than the average return on total assets which confirms the extreme variation in return of firms.

Tangibility plays an important in acquisition of debt. Table 4.1 shows that on average firms have 0.3893 or 38.93% of their total assets in form of tangible with median 0.3691 or 36.91% approximately. The maximum value 0.9947 or 99.47% itself shows the importance of this factor that some firms have near about all assets in tangible form which help these firms in growth and acquisition of debt at the time of expansion. On the other extreme minimum value 0.0100 shows that some firms just invest 1% in capital expenditure these firms can be service oriented which may require less non-current assets and their major investment is in working capital. Larger value of standard deviation (0.2386) also explains this variation in firm's nature to invest in capital items.

Ls (Natural log of total assets); the proxy to measure the size of the business, shows higher Values on average i.e., mean value 7.2056 and median 7.0475, due to the higher values on Ln of assets index, size of business is an important variable

in choice of capital. Here, the reason for higher value can be the base of selection of sample firms as we took largest 50 firm with respect to market capitalization, so these larger firms have more assets due to which it gives higher values of Ln of Assets. At maximum side one firm have size of 11.649 on the other extreme at minimum side a firm have 0.6896 value of log of assets. Standard deviation value for the firm size is 1.275.

Table 4.1 shows that on average the selected firms have 3.37 times growth in term of market to book value of equity and median value 2.08 in sample of 6277 firms across 15 countries. Maximum and minimum growth rate is 54.64 and decreasing rate is (0.05) which depicts two extreme situation where one firm shows 54.64 times growth in market price of its shares as compare to book value which indicate its importance in financial decision of the firm, on the other extreme there is downfall to 0.05 times in market to book value, which also creates a lot of questions for these adverse growth firms that how they will raise funds , as issuance of equity at time of negative growth is very difficult and acquiring debt at this stage can increase cost of capital along with chances of bankruptcy. The value of standard deviation is 6.786.

Descriptive table 4.1 also gives the details of governance variables such as board size, dual position of CEO as director and number of females in board room. Board size has mean value of 9.348, approximately 9 board of directors on average which is also the value of median. Maximum number of directors in a sample firm is 21 and minimum number is 2, indicating a lot of variation in board size. Larger the board more diversity will be there in terms of gender, education, experience, nationality, values and culture. Standard deviation is 3.2719.

For dual position of Dir\_CEO dummy variable is created.1 for the presence of Dir\_CEO and 0 for absence. So maximum value is 1 and minimum value is 0. Female Representation is also considered as an important element in board decisions. To measure this variable data of number of female directors have been taken. Very interesting results from the table can be observed, firms even have 21 board members in the selected sample, but still very small representation of female is in the board, maximum number of female's directors are 6 and at minimum point, even no female board member is present. On average firms have 1.009 means 01

female member which is equal to median.

Main variables of this study “culture affect” is measured through cultural dimensions of Hofstede (1984, 2001), all six dimensions MAS, UNC AVO, IND, PD, LTO and INDLG are used in this study. Average value of MAS is 48 with median 50. Maximum value across the sample is 95 and minimum value is 8 with standard deviation 21.61. Uncertainty Avoidance have average value of 62.93 which is nearly equal to median as 60, maximum and minimum values are 92 and 40 respectively with standard deviation 16.71. Individualism have mean value 44.87 approaching this value median is equal to 46. Maximum and minimum values are 80 and 14 respectively with standard deviation 21.17. The average value of Power Distance is 59.17 and median value is 57 for the complete sample as shown at Table 4.1. The maximum and minimum values of Power Distance are 93 and 31 with standard deviation of 16.55. Long Term Orientation have mean value of 47.33 with median 46. Its extreme points are 88 and 0 with standard deviation 16.57 and Indulgence which is sixth dimension of Hofstede is relatively new and its values are available for few countries. Its mean value is 36.86 with median 42. Its maximum and minimum values are 68 and 0 with standard deviation 21.4.

This section represents the correlation results between the variables of whole sample. The correlation analysis describes the association between the independent variables of the study, it is also helpful in determining the multicollinearity between the explanatory variables of the research. Table 4.2 describes the outcomes of correlation analysis of the explanatory and control variables selected for this study. The findings signify the nonexistence of multicollinearity among the variables as the correlation coefficients of the variables under study lies below the threshold level i.e., 0.70.

Below table displays the association between leverage and liquidity (current ratio), growth, tangibility, profitability, LS (size) , board size , director and CEO, number of female directors, PD, MAS, UNC AVOI, IND INDLG and LTO is -0.0326, 0.0184, ,0.0796, -0.0053, 0.4056, -0.0752, -0.0174, -0.1023, 0.1473, 0.0432, -0.0782,

TABLE 4.2: Correlation Matrix for Overall Sample

	LVG	CUR	GROW	TANG	PROF	LS	BSZ	DIR_CEO	FEMALE	PD	MAS	UNCAVOI	IND	INDLG	LTO
<b>LVG</b>	1.000														
<b>C_RATIO</b>	-0.042	1.000													
<b>GROW</b>	-0.024	0.014	1.000												
<b>TANG</b>	-0.015	-0.200	-0.092	1.000											
<b>PROF</b>	-0.044	0.096	0.048	0.016	1.000										
<b>LS</b>	-0.047	0.080	0.146	0.080	0.128	1.000									
<b>BSZ</b>	0.067	-0.158	-0.078	0.042	-0.068	0.041	1.000								
<b>DIR_CEO</b>	-0.038	-0.052	-0.053	0.054	-0.033	-0.044	0.221	1.000							
<b>FEMALE</b>	-0.028	-0.027	0.007	-0.058	-0.035	-0.087	0.251	0.100	1.000						
<b>PD</b>	-0.027	0.054	0.074	0.159	0.132	0.216	-0.147	-0.166	-0.444	1.000					
<b>MAS</b>	0.043	-0.011	-0.027	-0.040	0.015	0.367	0.217	-0.101	-0.220	0.019	1.000				
<b>UNC_AVOI</b>	0.033	-0.032	-0.066	-0.137	-0.029	-0.059	0.133	-0.096	-0.152	-0.088	0.445	1.000			
<b>IND</b>	0.060	-0.092	-0.103	-0.120	-0.140	-0.379	0.263	0.111	0.390	-0.690	0.095	-0.104	1.000		
<b>INDLG</b>	-0.003	-0.021	-0.009	-0.116	-0.099	0.071	0.243	0.220	0.441	-0.640	0.091	-0.033	0.621	1.000	
<b>LTO</b>	0.035	-0.011	0.016	-0.037	-0.120	0.406	0.039	-0.086	-0.272	0.022	0.565	0.358	-0.074	-0.085	1.000

*Note: This table describes correlation matrix for firm specific variables Leverage (LEV), liquidity (CUR\_RATIO), growth, tangibility, profitability, LS (size, Ln of assets), board size (BSZ), Director and CEO (D\_CEO), Number of female director (FEMALE), PD (Power Distance), Masculinity (MAS), Uncertainty Avoidance (UNC AVOI), Individualism (IND), Indulgence (INDLG) and Long-Term Orientation (LTO).*

*Where as: TANG refers to Tangibility, PROF refers to Profitability, GROW refers to Growth, C\_RATIO referes to CUR\_RATIO*

0.1893, 0.0125, 0.1807. It shows leverage have positive association between growth, tangibility, size (Ln of assets), PD, MAS, INDLG and LTO but negative relation with liquidity (current ratio), profitability, board size, director and CEO, number of female director, and UNC AVOI, IND.

Correlation matrix between liquidity (current ratio) and growth, tangibility, profitability size (Ln of assets), board size, director and CEO, no of female director, PD, MAS, UNC AVOI, IND, INDLG and LTO is 0.0144, -0.1995, 0.095, 0.080, -0.1577, -0.0519, -0.027, 0.054, -0.011, -0.032, -0.092, -0.021 and 0.011. This table shows that liquidity have positive association with growth, profitability size (Ln of assets), board size, no of female director, PD and MAS, negative relation with tangibility, director and CEO, UNC AVOI, IND, INDLG and LTO. Values of Growth correlation with tangibility, profitability size (Ln of assets), board size, director and CEO, no of female director, PD, MAS, UNC AVOI, IND, INDLG and LTO is -0.092, 0.048, 0.145, -0.053, 0.007, -0.073, -0.027, -0.066, -0.103, -0.009, 0.0160, respectively. Growth shows direct relation with liquidity, profitability size (Ln of assets), PD and LTO and inverse relation with tangibility, board size, director and CEO, no of female director, MAS, UNC AVOI, IND and INDLG. The correlation of Tangibility with profitability size (Ln of assets), board size, director and CEO, no of female director, PD, MAS, UNC AVOI, IND, INDLG and LTO is 0.0156, 0.80, 0.041, 0.053, -0.058, 0.159, -0.040, -0.137, -0.120, -0.115 and -0.037 respectively.

The correlation of profitability with size (Ln of assets), board size, director and CEO, no of female director, PD, MAS, UNC AVOI, IND, INDLG and LTO is 0.128, -0.068, -0.033, -0.035, 0.132, 0.015, -0.029, -0.14, -0.099 and -0.120. Here there is positive relation between profitability, size (Ln of assets), PD, MAS and negative relation board size, director and CEO, no of female director, UNC AVOI, IND, INDLG and LTO.

Association between size of business and board size, director and CEO, number of female director, PD, MAS, UNC AVOI, IND, INDLG and LTO is 0.041, -0.044, -0.087, 0.216, 0.367, -0.059, -0.379, 0.071 and 0.406. This correlation is positive between size of business and board size, PD, MAS, INDLG and LTO and negative between director and CEO, no of female director, UNC AVOI and IND. leverage

which is dependent variable but its lag leverage (-1) is also included in explanatory variables shows association between board size, director and CEO, no of female director, PD, MAS, UNC AVOI, IND INDLG and LTO in values of 0.067,-0.038,-0.028,-0.027,,0.043,0.033,0.060,-0.003 and 0.035.Leverage shows increasing trend with board size, MAS, UNC AVOI, IND and LTO and decreasing relation with director and CEO, no of female director, PD and INDLG.

Similarly, correlations between governance index and cultural dimension of Hofstede are also very important for under-research topic. Three governance variables whose data has been taken across the world's major economies are board size, dual position of director as CEO and no of females in the governance board.

Correlation between Board size, director and CEO, no of female director, PD, MAS, UNC AVOI, IND INDLG and LTO is 0.221, 0.250, -0.147,0.217,0.132,0.263, 0.243 and 0.039, respectively. Board size shows positive relation between director and CEO, no of female director, MAS, UNC AVOI, IND INDLG and LTO while there is inverse relation between Board size and PD. Dual position of Directors (Director and CEO) association with number of female director, PD, MAS, UNC AVOI, IND INDLG and LTO given in the table shows values 0.099, -0.166, -0.101, -0.096, 0.111, 0.22 and -0.086.

Here we can see the positive association between no of female director, IND and INDLG and negative relation with , PD, MAS, UNC AVOI and LTO. Correlation matrix between No of female directors and cultural dimensions of Hofstede PD, MAS, UNC AVOI, IND INDLG and LTO shows relation of -0.444, -0.219, -0.152,0.389,0.441 and -0.272 respectively.no of female directors shows positive association between IND and INDLG while negative relation for other four cultural dimensions i.e., PD, MAS, UNC AVOI and LTO.

Six Cultural dimensions also have association and here at some points we can see strong association in values such the value between PD and IND -0.689, PD and INDLG -0.639 and IND and INDLG is 0.621. These are the highest correlations in this matrix. Correlation between PD, MAS, UNC AVOI, IND INDLG and LTO is 0.019, -0.088, -0.689, -0.639 and 0.021. Here the relation between MAS and LTO and negative relation between UNC AVOI, IND and INDLG. MAS association with UNC AVOI, IND INDLG and LTO is 0.444, 0.095, 0.091 and 0.565. MAS



have direct association with UNC AVOI, IND INDLG and LTO. UNC AVOI correlation with IND INDLG and LTO is -0.104, -0.033 and 0.357. UNC AVOI shows positive relation with LTO and negative relation with IND and INDLG. IND association with INDLG and LTO is 0.621 and -0.073 while INDLG and LTO shows correlation of -0.084. When significance of variable was studied through EViews it was observed that leverage is insignificant with relation of Growth and profitability, Current ratio is insignificant w.r.t LTO, Growth w.r.t no of Female, Tangibility w.r.t profitability and PD relation with MAS was found insignificant.

In firm specific variable correlation values are too low to create any problem of multicollinearity as the highest value is between profitability and size 0.127 but this value is far from the threshold of multicollinearity. Correlation index shows lower values for governance variable as the maximum value here is 0.221 which is too lower to create problem of multicollinearity, but the correlation is high between 3 sets of cultural variables, PD and IND -0.689, PD and INDLG -0.639 and IND and INDLG is 0.621 but these values are also lower than 0.70.

## 4.2.2 Regression Results for Complete Sample

Regression result of company specific factor, governance variable and cultural dimension have been presented in this section which have been regressed with leverage. Before applying the specific model, Variance Inflation Factor (VIF) and Durbin–Watson (DW) tests/ heteroskedasticity test has been performed to check the multicollinearity and autocorrelation (serial correlation) respectively. The detailed analysis and estimated results are presented below.

### 4.2.2.1 Impact of Firm Specific Determinants on Capital Structure

Various scholars such as [Abor \(2007\)](#); [Long and Malitz \(1985\)](#); [Kim and Sorensen \(1986\)](#); [Rajan and Zingales \(1995\)](#); [Allen \(1995\)](#); [Ozkan \(2001\)](#); [Barclay and Smith \(2005\)](#); [Gaud et al. \(2005\)](#); [Frank and Goyal \(2009\)](#); [Sheikh and Wang \(2011\)](#); [Handoo and Sharma \(2014\)](#); [Karacaer et al. \(2019\)](#); [Güner \(2016\)](#); [Inderst and Vladimirov \(2019\)](#) emphasized on the significance of firm's specific factors on the decision related to capital structure.

Impact of firm specific variables on capital structure is analyzed through Equation (3.12). Results for equation are exhibited in Table 4.3.

TABLE 4.3: Impact of Firm Specific Determinants on Capital Structure

Variable	Coefficient	Stand.error	T.stat	Prob
<b>leverage (-1)</b>	0.7803	0.0033	235.984	0.0000
<b>cur_ratio</b>	0.2051	0.0659	3.1103	0.0019
<b>Growth</b>	-0.1208	0.0126	-12.01	0.0000
<b>Tangibility</b>	2.1351	0.7648	2.7915	0.01
<b>Profitability</b>	-1.6098	0.1604	-10.0343	0.0000
<b>Ls</b>	-0.129	0.065	1.985	0.0472
<b>P value</b>	0.0696			
<b>(j-statistics)</b>				

In the above table 4.3. leverage (Long term debt/ total Assets) is dependent variable while lag of leverage, Current Ratio (Cur.Ratio) , Growth (MV/BV), Tangibility (Book Value of Non-current Assets /Total Assets), profitability (PBIT/total Assets), LS (log of firm Size) are independent variables. Under GMM (Generalized method of moment/Dynamic Panel Data) dependent variable leverage is regressed with IVs and it has been found that all independent variables show significant results which means that firm specific factors have significant effect on the capital structure of the firm.

Results of model GMM reports that the relationship between lag of leverage and capital structure is significantly positive ( $\beta= 0.78$ ; p-value  $\leq 1\%$ ), indicating that those firms which already have debt in their equity, they know its advantage and prefer to take debt in future when they need funds. Liquidity also has positive relation with significant values ( $\beta= 0.21$ ; p-value  $\leq 1\%$ ). It means if liquidity increases 1unit firms will take 0.21 units more long-term debt, tangibility also has positively significant relation with leverage ( $\beta= 2.15$ ; p-value  $\leq 1\%$ ) results indicate that if 1 unit of non-current assets/total assets increases, firms will include 2.15 units of long term debt in their total equity. It shows the importance of tangible assets in firm's capital decision, as these noncurrent assets can be used collateral to take loan so in firm's life acquiring tangible asset gain importance.

Above results also indicate the negative relation between growth, profitability and size of firm. The relationship between growth and leverage is negative and significant at p-value  $\leq 1\%$  with beta value ( $\beta = -0.12$ ). These results are in align with (Rajan and Zingales, 1995; Allen, 1995; Ozkan, 2001; Barclay and Smith, 2005; Gaud et al., 2005; Frank and Goyal, 2009; Sheikh and Wang, 2011). Relationship between Profitability and capital structure is significantly negative with ( $\beta = -1.61$ ; p-value  $\leq 1\%$ ). Here higher value of beta indicates the implication of pecking order theory i.e., firms with high profitability prefer to reinvest their retained earnings which have zero cost of capital. These findings are consistent with our hypotheses and align with previous results indicate leverage (-1).

#### 4.2.2.2 Impact of Corporate Governance on Capital Structure

In presence of governance variables, (Board size, Director as CEO and number of Female Directors) the relation of firm specific determinants will be affected as the decisional body in any firm is their regulating body whose decisions affect the performance of the firm. Influencing factors of governance includes the board size, number of female directors and the dual position of director as CEO.

To examine the impact of governance variables (3.14) equation is applied.

By incorporating the governance variables i.e., total number of directors and dual position of CEO as director significant results were obtained while number of female directors shows insignificant outcomes. Larger board size and dual position of CEO as director also shows a positive relation with the leverage, while increased no. of female directors show a negative relation which is align with the prior notion that females are risk averse and they avoid leverage.

#### 4.2.2.3 Impact of Culture on Capital Structure

To investigate the impact of culture on capital structure data is analyzed through equation (3.15). Findings are in the following table.

Tabular summary (4.5) clarifies that all five cultural dimensions of Hofstede i.e., masculinity, individualism, uncertainty avoidance and indulgence show significant results. This means that country's culture from which the firm belongs to, has

TABLE 4.4: Impact of Sampled Governance Variables on Capital Structure

	Coefficient	Std.Error	T.statistics	P.value
<b>C</b>	0.0112	0.0099	1.1351	0.2564
<b>leverage (-1)</b>	0.7696	0.0865	8.8975	0.0000
<b>cur_ratio</b>	0.0039	0.0019	2.0429	0.0411
<b>Growth</b>	0.0010	0.0003	2.6609	0.0078
<b>Tangibility</b>	0.0413	0.0212	1.9460	0.0517
<b>Profitability</b>	-0.0412	0.0102	-4.0441	0.0001
<b>LS</b>	-0.0043	0.0014	-2.9588	0.0031
<b>BSZ</b>	0.0020	0.0007	3.0619	0.0022
<b>DIR_CEO</b>	0.0065	0.0030	2.1755	0.0296
<b>FEMALE</b>	0.0012	0.0015	0.7868	0.4314
	Weighted Statistics		Unweighted Statistics	
<b>R-squared</b>	0.7829		0.6781	
<b>Adjusted R-squared</b>	0.2193		0.1796	
<b>Durbin-Watson stat</b>	2.0168		2.2469	
<b>F-statistic</b>	2251.8830			
<b>F-stat (p valu)</b>	0.0000			

a vital effect on the management's decision about the choice of capital structure. Masculinity, uncertainty avoidance, individualism and long-term orientation show a positive relation with leverage, while power distance and indulgence show negative relation across.

Masculinity and leverage direct relation are also observed by [Willemink \(2018\)](#) who says that masculinity means risk taking, in masculine societies managers are risk taker and believe on high-risk high return, so managers of masculine societies have positive tendency toward leverage. Uncertainty avoidance also shows positive relation as [Chen and Chen \(2012\)](#) found societies with higher value of UNA are highly rule oriented so they have more disclosure of information which reduces the chances of bankruptcy.

[Kwok and Tadesse \(2006\)](#); [Boubakri and Saffar \(2016\)](#); [Willemink \(2018\)](#) confirmed the positive relation of Uncertainty Avoidance and debt financing. Direct relation of Individualism with leverage is endorsing the findings of [Gray et al. \(2013\)](#); [Wang](#)

TABLE 4.5: Impact of Culture on Capital Structure

	Coefficient	Std.Error	T.statistics	P.value
<b>C</b>	-0.0823	0.0243	-3.3839	0.0007
<b>leverage (-1)</b>	0.8290	0.0576	14.4050	0.0000
<b>Cur_ratio</b>	0.0026	0.0012	2.1667	0.0340
<b>Tangibility</b>	0.0412	0.0158	2.6057	0.0092
<b>Profitability</b>	-0.0267	0.0066	-4.0461	0.0001
<b>Ls</b>	0.0042	0.0023	1.7945	0.0728
<b>Growth</b>	0.0013	0.0034	0.3824	0.7080
<b>BSZ</b>	0.0078	0.0030	2.6670	0.0082
<b>DIR_CEO</b>	-0.0090	0.0060	-1.3799	0.1677
<b>FEMALE</b>	-0.0011	0.0003	-2.7281	0.0064
<b>MAS</b>	0.0020	0.0010	2.0000	0.0010
<b>UNC AVOI</b>	0.0010	0.0003	3.3333	0.0004
<b>IND</b>	0.0055	0.0018	3.1482	0.0017
<b>PD</b>	-0.0002	0.0001	-1.8036	0.0713
<b>LTO</b>	0.0010	0.0002	4.2377	0.0000
<b>INDLG</b>	-0.0020	0.0003	-6.6667	0.0000
	Weighted Statistics		Unweighted Statistics	
<b>R-squared</b>	0.7845		0.6807	
<b>Mean dependent var</b>	0.2194		0.1796	
<b>Durbin-Watson stat</b>	2.0095		2.2431	
<b>F-statistic</b>	1362.2900			
<b>Prob(F-statistic)</b>	0.0000			

and Esqueda (2014); Boubakri and Saffar (2016); Willemink (2018) who found that in individualistic culture more agency problem exists, to achieve their targets managers preference is lower cost of capital even on the cost of shareholders. Long term orientation also depicts increasing trend toward debt as Willemink (2018) findings show direct relation.

#### 4.2.2.4 Conclusion

From the results of regression our hypotheses have been proved that culture of the country significantly affects the decision of leverage in a firm. The signs of beta in case of Masculinity, Uncertainty Avoidance, Individualism, Power Distance and Long-Term Orientation are aligned with the developed hypotheses, for Indulgence the beta sign is opposite to developed Theory. As it's a newly added cultural dimension for which data for some countries still is not available such as for Pakistan so it can be the possible reason of deviation from developed hypotheses.

TABLE 4.6: Summary of Cultural Dimensions on Capital Structure in all Sampled Countries

Cultural Dimensions	Mean Value	Sign of Beta
MAS	48	+VE
UNC AVOI	62	+VE
IND	45	+VE
PD	59	-VE
LTO	47	+VE
INDLG	36	-VE

In the summary given above it is evident that for Masculinity, Individualism and long-term orientation mean values are less than 50 depicting the lower trend of masculinity, individualism and long-term orientation, due to presence of these dimensions at lower scale beta shows positive relation with leverage. Mean value of Uncertainty Avoidance and Power Distance is above 50 pointing toward the presence of these cultures in the sampled countries, Hypotheses developed in section 2 predicted positive sign of Uncertainty Avoidance and negative beta for PD which is confirmed by these findings.

In the context of above outcomes, a firm's stakeholders (existing or possible managers in future, investors, market analyst, competitors ... etc.) should analyze the culture where the business operates, to understand the firm's existing leverage choices, and anticipate its future actions on leverage.

### 4.3 Empirical Results for All Sampled Variables

#### 4.3.1 Descriptive Summary and Correlation Matrix for All Variables

In this part of the thesis countries providing maximum regressors of governance data has been included to explore the effect of all sampled variables of governance incorporated in this study having impact on the decision of capital structure in presence of firm specific determinants and Hofstede cultural dimensions. This sample consist of 50 largest firms with respect to market capitalization in the period of 2006-2016, for the countries Pakistan, Bangladesh, India, Norway, Spain,

Finland, Italy and turkey. Sample includes 300 firms with 3037 observation of panel data.

Firm specific variables include current ratio, profitability, tangibility, Ls (size of firm) and growth of firm in term of MV to BV. Governance variables include board size, director as CEO, Chairman as CEO, presence or absence of female, these three variables are taken as dummy variable, (presence=1, absence=0), number of female Directors, Number of Independent directors and number of foreign directors. Cultural dimensions include all six dimensions of Hofstede i.e., MAS, UNC\_AVOI, PD, IND, LTO and INDLG.

Table 4.7 shows about leverage (-1) on average firms depends 35.11% for debt on their preceding non-current liability, with median 14.74% maximum value of leverage (-1) 204.03%, with minimum value 0% and standard deviation 19.45%. Current ratios tell about non-current liability of data, Average ratio is 17:51, with median 1.3: 1, maximum current assets are 17.4 times of the current liability with minimum value of 0.13:1, standard deviation value is 13%.

Table 4.7 shows about current ratios, Average ratio is 1.57:1, with median 1.3: 1, maximum current assets are 17.4 times of the current liability with minimum value of 0.13:1, standard deviation value is 13%.

On average firms have 10.06% return on total assets, with median 8.89%, maximum profit is 482.5% with maximum loss of 4.02% on its total assets. standard deviation value is 18.8%. On average firm's total assets comprised of 34.94% on tangible assets, with median value 33.28%. Maximum tangible assets are 99% of total assets with minimum value 0.1%. Standard deviation value is 22.94%.the mean value of the size of business is 6.833 with median 6.77, maximum value is 9.23 with minimum 3.93, standard deviation value is 81.95%. on average firms have growth of 3.3722 times in its MV to BV, median value is 2.08 with max 54.64 times and minimum .05 times. Standard deviation value is 6.79. On average firms have 9 directors, median value is 9 with maximum no of director 21 and minimum 3, value of standard deviation is 3.07. CEO's executing the role of director is taken as dummy with 1 for performance of dual role and 0 for absence. Chairman performing duties of CEO is also taken as dummy variable, (1= yes, 0= No). No of female directors on average in a firm is 1, with median 1, maximum no of

TABLE 4.7: Descriptive Statistics for All Sampled Governance Variables

Variables	Mean	Median	Maximum	Minimum	Std.Dev
<b>CUR_Ratio</b>	1.5717	1.3000	17.4000	0.13.00	1.0479
<b>Profitability</b>	0.1006	0.0889	4.8254	-4.0217	0.1881
<b>Tangibility</b>	0.3494	0.3328	0.9900	0.0010	0.2294
<b>Ls</b>	6.8334	6.7795	9.2327	3.9314	0.8195
<b>Growth</b>	3.3722	2.0800	54.6400	0.0500	6.7925
<b>BSZ</b>	9.1583	9.0000	21.0000	3.0000	3.0746
<b>DIR_CEO</b>	0.3832	0.0000	1.0000	0.0000	0.5510
<b>CHAIR_CEO</b>	0.1241	0.0000	1.0000	0.0000	0.5510
<b>FEMALE</b>	1.0912	1.0000	14.0000	0.0000	1.2273
<b>FEMALE P/A</b>	0.6190	1.0000	1.0000	0.0000	0.5510
<b>INDP_DIR</b>	3.9051	4.0000	17.0000	0.0000	2.9000
<b>FRGN DIR</b>	0.4227	0.0000	2.0000	0.0000	0.5007
<b>MAS</b>	45.2008	50.0000	70.0000	8.0000	16.6971
<b>UNC_AVOI</b>	65.9818	70.0000	86.0000	40.0000	15.5954
<b>IND</b>	46.8248	48.0000	76.0000	14.0000	20.7440
<b>PD</b>	56.2726	55.0000	80.0000	31.0000	16.1616
<b>LTO</b>	47.5472	48.0000	61.0000	35.0000	7.2311
<b>INDLG</b>	34.0296	30.0000	57.0000	0.0000	18.9972

*Note: This table describes descriptive statistics for firm specific variables liquidity (CUR\_RATIO), growth, tangibility, profitability, LS (size, Ln of assets), board size (BSZ), Director and CEO (DIR\_CEO), duality of chairman as CEO CHAIR\_CEO, Number of female director (FEMALE), Presence or absence of Female, FEMALE P/A, Independent Directors INDP\_DIR, Foreign Directors FRGN\_DIR, Masculinity (MAS), Uncertainty Avoidance (UNC AVOI), Individualism (IND), PD (Power Distance), Long-Term Orientation (LTO) and Indulgence (INDLG).*

female directors is 14 with minimum 0. value of standard deviation is 1.22. Presence or absence of female directors is also a dummy variable 1= present, 0 absent. Mean value of independent directors is 3.91 which is very close to median. Maximum no of independent directors is 17 with minimum no 0. Standard deviation value is 2.9. No of foreign directors on average is 0 with median 0, maximum no 2 and minimum also 0. Standard deviation value is 0.500.

MAS, cultural dimension of Hofstede has mean value of 45 with median 50. Max value is 70 and minimum 8, standard deviation value is 16.69. UNC\_AVOI have mean value 65.98 with median 70, Max value is 86 and minimum value 40 with standard deviation 15.59. IND have mean value 46.82 with median 48, Maximum value is 76 and minimum 14. Standard deviation value is 20.74. PD have mean value 56.27 with minimum 55. Maximum value is 80 with minimum 31. Standard deviation value is 16.16. LTO has mean value 47.54 with median 48, maximum



TABLE 4.8: Correlation Matrix (All Governance Variables Sampled for this Study)

	LEV	CUR	PROF	TANG	LS	GROW	BSZ	D_CEO	C_CEO	FE_DIR	FE_P/A	IN_DIR	FR_DIR	MAS	UNC_AV	IND	PD	LTO	INDLG	
<b>LEV</b>	1																			
<b>CUR</b>	-0.0621	1																		
<b>PROF</b>	-0.0622	0.1803	1																	
<b>TANG</b>	-0.0218	-0.1623	0.01327	1																
<b>LS</b>	-0.08862	0.0479	0.0238	0.2432	1															
<b>GROW</b>	-0.0075	-0.0135	0.0039	0.0238	1.0478	1														
<b>BSZ</b>	0.0892	-0.1629	-0.0702	0.0033	0.1426	-0.0129	1													
<b>D_CEO</b>	-0.0326	-0.0449	0.0218	-0.0529	-0.0601	-0.0092	0.134	1												
<b>C_CEO</b>	-0.01458	-0.0547	-0.0161	0.0117	0.1339	-0.0082	0.2489	0.0897	1											
<b>FE_DIR</b>	-0.0407	0.0328	-0.1182	-0.1409	-0.1305	0.0019	0.1236	0.0963	-0.0572	1										
<b>FE_P/A</b>	-0.0514	0.0427	-0.0093	-0.0695	-0.1194	-0.0057	0.0364	0.105	-0.04813	0.611	1									
<b>IN_DIR</b>	0.0273	-0.1105	-0.2045	-0.0722	-0.0744	-0.0268	0.3783	0.1563	0.1077	0.4059	0.195	1								
<b>FR_DIR</b>	0.0525	-0.0489	-0.0345	-0.0919	-0.0446	0.011	0.0887	0.1645	0.031	0.1039	0.0627	0.1195	1							
<b>MAS</b>	0.0726	-0.0801	0.1458	0.0788	0.17	0.0166	0.2505	-0.1899	0.1346	-0.4487	-0.2573	-0.2805	-0.1874	1						
<b>UNC_AV</b>	0.0269	-0.0042	0.0237	-0.1371	-0.3946	-0.0157	0.1791	0.0734	-0.012	-0.0057	-0.0012	-0.262	0.0839	0.1723	1					
<b>IND</b>	0.0776	-0.1064	-0.2277	-0.2268	-0.377	-0.0224	0.1794	0.066	0.0105	0.4179	0.1873	0.6211	0.046	-0.2013	-0.1096	1				
<b>PD</b>	-0.0203	-0.0289	0.1529	0.2338	0.4048	0.0375	0.1713	-0.2135	0.1381	-0.4783	0.1975	-0.3594	-0.1894	0.6522	-0.075	-0.539	1			
<b>LTO</b>	0.0933	-0.0965	0.0954	0.0299	0.1183	0.0105	0.3211	-0.2107	0.1645	-0.3426	-0.2676	-0.194	-0.1399	0.9504	0.2467	-0.0296	0.4719	1		
<b>INDLG</b>	-0.006	-0.0317	-0.2116	-0.2039	-0.4765	-0.02	0.0243	0.1992	-0.0928	0.4424	0.3044	0.4787	0.0901	-0.6195	0.0769	0.6895	-0.4761	-0.5748	1	

Note: This table describes Correlation Matrix for firm specific variables Leverage, liquidity (C\_RATIO), growth(GROW), tangibility, profitability, LS (size, Ln of assets), board size (BSZ), Director and CEO (D\_CEO), Number of female director (F\_Dir), PD (Power Distance), Masculinity (MAS), Uncertainty Avoidance (UNC\_AV), Independent Director(I\_DIR), Chairman Director (C\_CEO), Individualism (IND), FE\_P/A (FEMALE P/A), Frgn\_Dir(F\_DIR), Indulgence (INDLG) and Long-Term Orientation (LTO).

value is 61 and minimum value is 35. Standard deviation value is 7.23. Indulgence value is 34.02, median 30, Max value is 70 with minimum 0. Value of standard deviation is 18.99.

In the above correlation table current ratio has insignificant relation with growth Uncertainty Avoidance, Profitability depicts insignificant relation with tangibility and dual position of CEO as chairman. Tangibility has insignificant relation with dual position of CEO as director and BSZ.

### **4.3.2 Regression Results with all Sampled Governance Variable**

In this section all sampled variables of firm, governance and culture has been regressed with leverage. In three phases the variables have been analyzed to observe the affect of firm, governance and culture on Capital structure. Sampled countries include Pakistan, Bangladesh, Italy, India, Finland, Spain, Turkey and Norway.

#### **4.3.2.1 Impact of Firm specific Variables on Capital Structure of All Variables**

To estimate the relationship of firm and capital structure variables are analyzed through equation (3.13)

In the above table 4.9 constant value, Leverage (-1), profitability, tangibility, LS shows significant affect with leverage. F-statistics is also significant with 2.21 Durbin Watson which shows there is no problem of autocorrelation in the data. Lag of leverage (-1) and tangibility shows positive beta with values (0.8554,0.0294), Profitability and LS shows negative beta with values 0.0354 and .0011.

Comparing these results with the whole data of 1st section leverage (-1), tangibility, profitability and size of business (LS) have same signs of beta as in the whole sample. But the two variables found insignificant here i.e., current ratio and growth which were significant for the whole sample explaining that liquidity and growth affect the leverage decision if the sample include some countries as above data includes Sirilanka, Thailand, south Africa, Indonesia Qatar and Canada.

TABLE 4.9: Impact of Firm Specific Variables on Capital Structure of All Variables

Variable	Coefficient	St.error	t.stat	Prob
<b>C</b>	0.0368	0.0131	2.8023	0.0051
<b>LEVERAGE (-1)</b>	0.8554	0.0223	38.2827	0.0000
<b>CUR RATIO</b>	0.0002	0.0004	0.3877	0.6982
<b>PROFITABILITY</b>	-0.0354	0.0165	-2.1467	0.0319
<b>TANGIBILITY</b>	0.0294	0.0091	3.2271	0.0013
<b>LS</b>	-0.0011	0.0004	-2.7500	0.0057
<b>GROWTH</b>	-0.0031	0.0050	-0.6186	0.5362
	Weighted Statistics		Unweighted Statistics	
<b>R-squared</b>	0.7926		0.7591	
<b>Mean dependent var</b>	0.1901		0.1792	
<b>Durbin-Watson stat</b>	2.2104		2.3198	
<b>F-statistic</b>	1924.8980			
<b>Prob(F-statistic)</b>	0.0000			

#### 4.3.2.2 Impact of Governance on Capital Structure of all Variables

In the 1st section of all country's governance variables i.e., Board size, Dual position of CEO as director and number of female directors were studied but, in this sample, some other governance variables such as Chairman as CEO, presence or absence of female in board, number of independent director and number of foreign directors in the governance have been inculcated along the three existing determinants BZS, number of Female Directors and CEO as Director.

In this table 4.10) outcomes of regression shows that the presence of female have negative beta coefficient showing indirect relation between female in board and leverage, its proxy 'no of female members in the board' in 1st regression of whole sample also have negative relation with long term debt confirming the prior findings of (Carter and Cannon, 1992). They argue in this negative relation that female are risk averse i.e., (Mirza et al., 2012) But Muravyev et al. (2009) argues that reason for this negative relation is not the risk averse nature of female rather financial institution shows bias behavior and not prefer to give loans to female or charge higher transactional cost which discourage females to acquire loan.

Number of independent directors in the board shows significant result with negative coefficient, this means as number of independent directors increases in board

TABLE 4.10: Impact of Governance on Capital Structure

Variable	Coefficient	St.Error	t.stat	prob
<b>C</b>	0.0292	0.0138	2.1099	0.0350
<b>LEVERAGE (-1)</b>	0.8130	0.0096	84.5791	0.0000
<b>CUR_RATIO</b>	-0.0007	0.0015	-0.4951	0.6206
<b>PROFITABILITY</b>	-0.0264	0.0085	-3.1259	0.0018
<b>TANGIBILITY</b>	0.0458	0.0074	6.1966	0.0000
<b>LS</b>	-0.0041	0.0020	-2.0191	0.0436
<b>GROWTH</b>	0.0012	0.0010	1.2000	0.9290
<b>B_SIZE</b>	0.0018	0.0006	3.2547	0.0011
<b>DIR_CEO</b>	0.0026	0.0028	0.9318	0.3515
<b>CHAIR_CEO</b>	0.0016	0.0047	0.3306	0.7410
<b>FEMALE</b>	0.0026	0.0017	1.4959	0.1348
<b>FEM_PRESENCE _1</b>	-0.0066	0.0033	-2.0147	0.0440
<b>INDP_DIR</b>	-0.0015	0.0006	-2.0411	0.0164
<b>FRGN</b>	0.0051	0.0031	-1.6595	0.0971
<b>R-squared</b>	0.7622	<b>Durbin-Watson stat</b>	2.2547	
<b>Mean dependent var</b>	0.1797			
<b>F-statistic</b>	740.7064	<b>Prob(F-statistic)</b>	0.0000	

room, higher monitoring of manager increases their efficiency and increase the profit of the firm, so managers follow pecking order theory at time of funds requirement. Uwuigbe (2014); Budiman (2015); Purag et al. (2016) findings are consistent with the above results showing inverse relation between leverage and independent directors. No of foreign directors also have positive and significant relation with leverage. As these foreign directors belong from diverse culture , their significant relation confirms the effect of culture on financing decision of firm.

Other governance variable such as Dir\_CEO, CHAIR\_CEO, and Number of female directors and no of foreign directors have insignificant results for this part of study.

#### 4.3.2.3 Impact of Culture on Capital Structure

The main part of this study is to explore the reason that why in some countries, firm and governance variables have direct while in other's inverse relations with leverage. In this study we make assumptions that sign of coefficient is influenced by the culture of that region. For this purpose, six cultural dimensions of Hofstede has been regressed with leverage in presence of firm specific and governance related

variables.

Results of this regression table (4.11) depicts that cultural dimension such as MAS, UNC\_AVOI, IND, LTO and INDLG significantly effect on the capital decision of the firm, Mas UNC-AVOI, IND have positive beta explaining the direct relation of leverage with these dimensions, LTO and INDLG indicates inverse relation with long term debt while relation of PD is insignificant for this specific sample.

TABLE 4.11: Impact of Culture on Capital Structure of all Variables

Variable	Coefficient	St.Error	T.Stat	Prob
<b>C</b>	-0.1488	0.0560	-2.6566	0.0079
<b>LEVERAGE (-1)</b>	0.8331	0.0172	48.3385	0.0000
<b>CUR_RATIO</b>	0.0009	0.0004	1.9857	0.0472
<b>PROFITABILITY</b>	-0.0284	0.0149	-1.9066	0.0567
<b>TANGIBILITY</b>	0.0438	0.0090	4.8779	0.0000
<b>LS</b>	0.0016	0.0026	0.6327	0.5270
<b>GROWTH</b>	-0.0002	0.0005	-0.2931	0.7695
<b>B_SIZE</b>	0.0009	0.0002	4.0637	0.0000
<b>DIR_CEO</b>	0.0031	0.0026	1.1683	0.2428
<b>CHAIR_CEO</b>	0.0034	0.0056	0.6097	0.5421
<b>FEMALE</b>	-0.0011	0.0015	-0.7184	0.4726
<b>FEM_PRESENCE _1</b>	-0.0002	0.0027	-0.0621	0.9505
<b>INDP_DIR</b>	-0.0008	0.0002	-3.9124	0.0001
<b>FRGN</b>	-0.0024	0.0029	-0.8199	0.4123
<b>MAS</b>	0.0012	0.0007	1.8440	0.0653
<b>UNC_AVOI</b>	0.0032	0.0011	2.9091	0.0057
<b>IND</b>	0.0040	0.0001	3.1110	0.0019
<b>PD</b>	-0.0038	0.0036	-1.0448	0.2962
<b>LTO</b>	-0.0050	0.0027	-1.8691	0.0617
<b>INDLG</b>	-0.0012	0.0007	-1.7425	0.0815
	Weighted Statistics		Unweighted Statistics	
<b>R-squared</b>	0.7949		0.7634	
<b>Mean dependent var</b>	0.1902		0.1797	
<b>Durbin-Watson stat</b>	2.2062		2.3122	
<b>F-statistic</b>	611.4134	Prob(F-statistic)		0.0000

From these results and the findings of whole sample confirms the hypotheses that it is the culture of the country affecting the performance and decisions of the boardroom in term of capital structure that how much risky investment they will include in their capital. In this study all cultural dimensions are regressed in a single equation showing the effect of all dimensions at a same point of time.

The summery of the table shows that after inclusion of foreign directors and independent directors study hypotheses have been proved that culture of the country significantly affects the decisions of leverage in a firm. The signs of beta in case

TABLE 4.12: Summary of Cultural Dimensions on Capital Structure in all Sampled Countries

Cultural Dimensions	Mean Value	Sign of Beta
MAS	45	+VE sig
UNC AVOI	65	+VE sig
IND	46	+VE sig
PD	56	-VE/insig
LTO	47	-VE sig
INDLG	34	-VE sig

of Masculinity, Uncertainty Avoidance, Individualism, Power Distance are aligned with the developed hypotheses, for LTO and Indulgence the beta sign is opposite to developed Theory. Its mean that presence of Independent and foreign directors have influence in long term orientation and can influence this variable. INDLG is a newly added cultural dimension for which data for some countries still is not available such as for Pakistan so it can be the possible reason of deviation from developed hypotheses.

To get in depth Analysis and to understand the possible reason of this deviation in dimensions sampled countries are further subsampled based on economical (Developed vs Emerging) and geographical areas (Asia vs Europe).

#### 4.4 Empirical Results for Developed vs Emerging Countries

Findings of the Tables (4.5) and (4.11) depicts that cultural Dimensions such as Masculinity, Uncertainty Avoidance, Individualism, Long Term Orientation and Indulgence affects significantly on corporate financial decision. Outcome of Power Distance is insignificant in Table (4.11). So, our supposition about the impact of culture on capital structure proved significant. To get more in depth understanding of the study and to find out either culture affects 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 3290 firms/year observations of 300 companies for the period 2006–2016

#### 4.4.1 Descriptive Statistics and Correlation Matrix For Developed and Emerging Countries

TABLE 4.13: Descriptive Statistics of Emerging Countries

	Mean	Median	Maximum	Minimum
<b>CUR_RATIO</b>	1.6176	1.2900	10.5400	0.1400
<b>PROFITABILITY</b>	0.1474	0.1208	4.8254	-0.3253
<b>TANGIBILITY</b>	0.4320	0.4229	0.9900	0.0123
<b>LS</b>	7.4618	7.4336	9.2327	5.1756
<b>GROWTH</b>	4.4822	2.1300	58.0223	0.0900
<b>BSZ</b>	8.7213	8.0000	18.0000	3.0000
<b>FEMALE</b>	0.4133	0.0000	3.0000	0.0000
<b>INDP_DIR</b>	2.5909	2.0000	11.0000	0.0000
<b>MAS</b>	53.4040	55.0000	56.0000	50.0000
<b>UNC_AVOI</b>	53.3131	60.0000	70.0000	40.0000
<b>IND</b>	28.3266	20.0000	48.0000	14.0000
<b>PD</b>	68.9629	77.0000	80.0000	55.0000

Table (4.13) describes the descriptive behavior of the independent variables of firms for emerging countries. Descriptive statistics comprise of mean, median, standard deviation, Minimum and Maximum values of all variables. Mean and median values illustrate the central point of data while Standard deviation indicates the deviation and dispersion in data set.

Current ratio shows on average firms have \$1.61 for the payment of \$1 of short-term debt, median 1.29:1 with maximum ability of \$10.54 for payment of \$1 to minimum 0.14:1 with a wider spread between maximum and minimum values it has standard deviation of 1.10. On average firms have 14.74% profit with median 12.08%. Firms earn huge profit with maximum value of 482.52% as compared to total assets with some firms even with loss of 32.53%. Standard deviation between

the value is 17.68%. Tangibility shows that in emerging countries on average firms have 43.2% of their total assets as non-current assets. Median value is 42.2% with maximum value of 99% assets of the company in tangible form with minimum value of 1.23% of non-current assets from their total assets. Ln of Assets (ls) shows the size of firm with average size of 7.46 and median with 7.43 and maximum value of 9.23 and 5.17 and standard deviation of 66.28%. Growth in MV to BV on average is 4.48 times with median 2.13. Maximum growth in MV to BV is 72.64 times with fall in MV/BV of 32.15. Governance variables shows that on average emerging countries have 8 number of directors with same value for median 8. Maximum number of directors are 18 with minimum numbers of 3 having standard deviation of 2.90.

On average firms have 0 female director, median is also 0, Maximum number of female directors in emerging countries are 3 with minimum number 0. Dispersion in data shows standard deviation value of 63.59%. Average number of independent directors are 2 with median value 2. Maximum number is 11 with 0 minimum number of independent directors. Cultural dimension shows that the mean value of MAS is 53 with median 55. Maximum value of MAS is 56 with minimum value of 50 which shows lower level of Masculinity in emerging countries. Standard deviation for MAS is 2.78.

Uncertainty Avoidance have mean value of 53 with median 60. Maximum value of UNC\_AVOI is 70 with minimum value of 40. Standard deviation value is 13.70. Cultural insight values show that emerging countries have lower level of individualism, mean 28.32, median 20, spread between Maximum and minimum value of IND is 48 to 14. Standard deviation value is 15.64. PD value shows that emerging countries have tendency to accept the superior position of others in the society. Mean Value of PD is 68 with median 77. The maximum value of PD is 80 with median value 55. The standard deviation value is 11.35.

Table (4.14) describes the descriptive outcomes of the independent variables of firms for developed countries. Descriptive data encompass mean, median, standard deviation, Minimum and Maximum values of all variables.

Current ratio shows on average firms have 1.55:1 ratio for the payment of short-term debt, median 1.29:1 with maximum ability of 20.95:1 to minimum 0.13:1 with



TABLE 4.14: Descriptive Statistics (Developed Countries)

	Mean	Median	Maximum	Minimum
<b>CUR_RATIO</b>	1.5496	1.2900	20.9500	0.1300
<b>PROFITABILITY</b>	0.1000	0.0900	0.5900	-7.3300
<b>TANGIBILITY</b>	0.3256	0.2970	0.9900	0.0100
<b>LS</b>	6.4870	6.4682	8.7311	3.6389
<b>GROWTH</b>	2.7095	1.9000	46.0900	0.0410
<b>BSZ</b>	9.7372	9.0000	21.0000	4.0000
<b>FEMALE</b>	1.5597	1.0000	14.0000	0.0000
<b>INDP_DIR</b>	5.3876	5.0000	17.0000	0.0000
<b>MAS</b>	41.8497	45.0000	70.0000	8.0000
<b>UNC_AVOI</b>	67.9620	75.0000	86.0000	48.0000
<b>IND</b>	62.3929	63.0000	80.0000	37.0000
<b>PD</b>	46.3549	50.0000	66.0000	31.0000

a wider spread between maximum and minimum values it has standard deviation of 1.13. On average firm have 10% profit with median 9%. Firms earn huge profit with maximum value of 59% with some firms even with maximum loss of 7% to total assets. Standard deviation between the value is 41.70%. Tangibility shows that in developed countries on average firms have 32.56% of their total assets as non-current assets. Median value is 29.70% with maximum value of 99% assets of the company in tangible form with minimum value of 1% of non-current assets from their total assets. Standard deviation value for tangibility is 23%.

Ln of Assets (ls) shows the size of business with average size of 6.48 and same value of median and maximum value of 8.73 and 3.63 and standard deviation of 64.57%. Growth in MV to BV on average is 2.70 times with median 1.90. Maximum growth in MV to BV is 46.09 times with fall in MV/BV to 4 times. Governance variables shows that on average emerging countries have 9 number of directors with same median. Maximum number of directors are 21 with minimum number of 4 having standard deviation of 3.20. On average firms have 1 female director, median is also 1, Maximum number of female directors in emerging countries are 14 with minimum number 0. Dispersion in data shows standard deviation value of 1.30. Average number of independent directors are 5 with median value 5. Maximum number is 17 with 0 minimum number of independent directors, standard deviation value is 3.09. Cultural dimension shows that the mean value of MAS is 41 with

median 45. Maximum value of MAS is 70 with minimum value of 08 which shows lower level of Masculinity in developed countries. Standard deviation for MAS is 18.46.

Uncertainty Avoidance have mean value of 67.96 with median 75. Maximum value of UNC\_AVOI is 86 with minimum value of 48. Standard deviation value is 15.41. Cultural insight values show that developed countries have higher level of individualism with mean 62.39, median 63, spread between Maximum and minimum value of IND is 80 to 37. Standard deviation value is 14.82. PD value shows that developed countries accept on lower level the superior position of others in the society. Mean Value of PD is 46.35 with median 50. The maximum value of PD is 66 with minimum value 31. The standard deviation value is 12.58.

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.

In Table (4.15), correlation matrix between lag of leverage and liquidity, growth, tangibility, profitability, firm size, board size, female, independent directors, Masculinity, Uncertainty Avoidance, Individualism and Power Distance -0.0668, 0.0710,

TABLE 4.15: Correlation Matrix for Emerging Countries

	LEV	CUR	GROW	TANG	LS	BSZ	FEMALE	INDP	MAS	IUNC_AVOI	IND	PD
<b>LEV</b>	1											
<b>CUR</b>	-0.1200	1										
<b>GROW</b>	0.0673	-0.031	1									
<b>TANG</b>	0.3642	-0.2847	0.0473	1								
<b>PROF</b>	0.0748	0.3057	0.0122	-0.1592								
<b>LS</b>	0.0111	0.0435	0.0443	-0.016	1							
<b>BSZ</b>	0.0454	-0.1024	-0.0448	0.0858	0.3242	1						
<b>FEMALE</b>	-0.0415	0.0302	-0.0052	0.0495	0.0043	0.0185	1					
<b>INDP_DIR</b>	0.1047	-0.1628	-0.023	0.0444	0.1628	0.5667	0.0463	1				
<b>MAS</b>	-0.1997	-0.1453	0.0189	0.0878	0.1494	0.2983	0.036	0.6041	1			
<b>UNC_AVOI</b>	0.2045	0.2004	-0.0222	-0.0779	-0.2247	-0.392	0.0128	-0.7579	-0.8961	1		
<b>IND</b>	0.1225	-0.2093	0.0223	0.0714	0.2389	0.4049	-0.0278	0.7742	0.825	-0.9901	1	
<b>PD</b>	0.1225	-0.1046	0.0156	0.0859	0.0978	0.2248	0.0586	0.4741	0.9726	-0.7684	0.6711	1

Note: This table describes correlation matrix for firm specific variables Leverage(LEV), 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), Masculinity (MAS), Uncertainty Avoidance (UNC\_AVOI), Individualism (IND) and PD (Power Distance).

0.3710, -0.0298, 0.0314, 0.0572, -0.0359, 0.1135, 0.1643, -0.2118, 0.2137, 0.1257.

Relationship between liquidity (CUR\_RATIO) and growth, tangibility, profitability, LS, BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, IND and PD is -0.031, -0.2847, 0.3057, 0.0435, -0.1024, 0.0302, -0.1628, -0.1453, 0.2004, -0.2093, and -0.1046. Liquidity shows direct association with profitability, LS, FEMALE, IND, while liquidity (CUR\_RATIO) shows inverse connection with growth, tangibility, BSZ, INDP\_DIR, MAS, IND and PD.

Association between growth and tangibility, profitability, LS, BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, Ind and PD is 0.0473, 0.0122, 0.0443, -0.0448, -0.0052, -0.023, 0.0189, -0.0222, 0.0223 and 0.0156. These results depict the direct relation between growth and tangibility, profitability, LS, MAS, IND, and PD. BSZ, FEMALE, INDP\_DIR and UNC\_AVOI shows negative relation with growth. Correlation matrix between tangibility and profitability, LS, BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, IND and PD is -0.1592, -0.016, 0.0858, 0.0495, 0.0444, 0.0878, -0.0779, 0.0714 and 0.0859. With increase in tangibility BSZ, number of female directors, INDP\_DIR, MAS, IND and PD increases showing positive relation while profitability, ls and UNC\_AVOI shows negative relation with tangibility. Association between profitability and LS, BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, Ind, PD and LTO is 0.0937, -0.0802, 0.0349, -0.1394, -0.1416, 0.1702, -0.172 and -0.115. These values illustrate that there is direct relation with profitability and LS, no of female directors and Unc\_avoI and opposite relation between BSZ, INDP\_DIR, MAS, IND and PD.

Above matrix also depicts values of correlation between LS and BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, Ind and PD is 0.3242, 0.0043, 0.1628, 0.1494, -0.2247, 0.2389, 0.0978 and 0.2019. It shows that LS, BSZ, FEMALE, INDP\_DIR, MAS, IND and PD have positive and UNC\_AVOI have negative relation with LS (Ln of Assets).

Correlation matrix between governance variables and cultural dimensions of Hofstede's shows that BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, Ind and PD is 0.0185, 0.5667, 0.2983, -0.392, 0.4049 and 0.2248. BSZ have positive relation with LS, FEMALE, INDP\_DIR, MAS, Ind and PD but negative with UNC\_AVOI. No of female directors shows the values of association between Female directors and

INDP\_DIR, MAS, UNC\_AVOI, Ind, PD and LTO is 0.0463, 0.036, 0.0128, -0.0278, 0.0586 and -0.1024. Other than IND and LTO all remaining variables have positive relation and rest two shows opposite relation with no of female directors.

Relation between INDP\_DIR and MAS, UNC\_AVOI, Ind and PD is 0.6041, -0.7579, 0.7742 and 0.4741. Above values describes the positive relation between INDP\_DIR and MAS, Ind and PD while UNC\_AVOI depicts opposite sign. correlation between MAS and UNC\_AVOI, Ind and PD is -0.8961, 0.825 and 0.9726 showing positive relation between MAS, Ind and PD. Contrary to this UNC\_AVOI have negative association with MAS. Correlation values of UNC\_AVOI with Ind and PD is -0.9901 and -0.7684. UNC\_AVOI have opposite relation with all variables. Ind shows direct relation with PD with value of 0.6711.

In firm specific variable correlation values are too low to create any problem of multicollinearity as the highest value is between tangibility and liquidity which is 0.33, this value is far from the threshold of multicollinearity. Correlation values for governance variable shows the maximum value of 0.56 which is also lower to create problem of multicollinearity, but the correlation is high between 3 sets of cultural variables, PD and IND and uncertainty avoidance. Correlation table of emerging countries shows that leverage has insignificant relation with tangibility and profitability, liquidity shows insignificance relation with growth, tangibility and profitability have insignificance results with LS and female correlation with Masculinity and uncertainty Avoidance is insignificant.

In Table 4.16, correlation matrix between lag of leverage and liquidity (CUR\_RATIO), growth, tangibility, profitability, LS, BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, Ind and PD is -0.0620, -0.0125, -0.0259, -0.0475, -0.0861, 0.0902, -0.0644, 0.0016, 0.0903, 0.0227, 0.0596, 0.0133. Leverage shows positive relation with BSZ, FEMALE, INDP\_DIR, MAS, IND and PD while liquidity (CUR\_RATIO), growth, tangibility, profitability, LS, and UNC\_AVOI shows negative relation with preceding years long term debt. In emerging countries growth, tangibility, profitability, size of business shows positive relation with long term debt which is inverse in case of developed countries. Number of female directors has negative connection in emerging countries with leverage but positive in developed showing the effect of culture on their decision. Relationship between liquidity (CUR\_RATIO) and

TABLE 4.16: Correlation Matrix for Developed Countries

	LEV	CUR	GROW	TANG	LS	BSZ	FEMALE	INDP	MAS	IUNC_AVOI	IND	PD
<b>LEV</b>	1											
<b>CUR</b>	-0.0657	1										
<b>GROW</b>	-0.0058	-0.0065	1									
<b>TANG</b>	-0.0237	-0.1135	-0.0065	1								
<b>PROF</b>	-0.0317	0.0192	0.8105	0.0028								
<b>LS</b>	-0.0912	-0.0742	0.0957	0.2374	1							
<b>BSZ</b>	0.0899	-0.2027	0.0453	0.0721	0.2942	1						
<b>FEMALE</b>	0.0647	0.0239	0.015	0.0042	0.2822	0.1799	1					
<b>INDP_DIR</b>	0.002	-0.0965	0.0217	0.166	0.3197	0.3946	0.372	1				
<b>MAS</b>	0.0899	0.0952	-0.0157	0.0159	-0.0974	0.3784	-0.31	-0.0981	1			
<b>UNC_AVOI</b>	0.023	-0.0811	0.0397	-0.1201	-0.1644	0.2036	-0.3274	-0.5485	0.3826	1		
<b>IND</b>	0.0593	-0.022	-0.0367	0.0713	0.1132	0.0838	0.2173	0.5273	0.1973	-0.733	1	
<b>PD</b>	0.0133	-0.0384	0.0196	-0.0259	-0.0684	0.2532	-0.358	-0.5257	0.5096	0.9055	-0.706	1

Note: This table describes correlation matrix for firm specific variables Leverage(LEV), 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), Masculinity (MAS), Uncertainty Avoidance (UNC\_AVOI), Individualism (IND) and PD (Power Distance).

growth, tangibility, profitability, LS, BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, IND, PD and LTO is -0.0065, -0.1135, 0.0192, -0.0742, -0.2027, 0.0239, -0.0965, 0.0952, -0.081, -0.022, -0.0384, -0.0987. Liquidity shows direct association with profitability, FEMALE, MAS, while liquidity (CUR\_RATIO) shows inverse connection with growth, tangibility, LS, BSZ, FEMALE, INDP\_DIR, PD and LTO. In developed countries LS, MAS and UNC\_AVOI shows inverse relation with liquidity as compared to emerging countries.

Association between growth and tangibility, profitability, ls, BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, IND, PD and LTO is -0.0065, 0.8105, 0.0957, 0.0453, 0.015, 0.0217, -0.0157, 0.0397, -0.0367, 0.0196 and 0.0275. These results depict the direct relation between growth and profitability, LS, BSZ, FEMALE, INDP\_DIR, UNC\_AVOI, PD and LTO. Tangibility, MAS and IND displays negative relation with growth. Correlation values of emerging countries shows opposite sign for most of the variable's w.r.t developed countries data. Tangibility, BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI and IND have inverse relation with liquidity as compared to emerging countries.

Correlation matrix between tangibility and profitability, ls, BSZ, FEMALE, INDP\_DIR, MAS, IND, PD and LTO is 0.0028, 0.2374, 0.0721, 0.0042, 0.166, 0.0159, -0.1201, 0.0713, -0.0259 and -0.1601. With increase in tangibility profitability, LS, BSZ, FEMALE, INDP\_DIR, MAS, IND and PD increases showing positive relation while profitability, ls, UNC\_AVOI and LTO shows negative relation with tangibility. Here also different sign of correlation can be observed between Tangibility and profitability, ls, PD and LTO in developed and emerging countries.

Association between profitability and LS, BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, Ind, PD and LTO is 0.174, 0.0307, 0.0166, -0.0091, -0.0267, 0.0271, 0.0799, -0.0659, 0.0622 and 0.0538. These values illustrate that there is direct relation with profitability and LS, BSZ, MAS, UNC\_AVOI, IND, PD and LTO. The relation of profitability with FEMALE INDP\_DIR and IND are in opposite direction. Relation of profitability with BSZ, FEMALE Mas, PD and LTO shows opposite signs for developed and emerging countries.

Above matrix also depicts values of correlation between LS, BSZ, FEMALE, INDP\_DIR, MAS, UNC\_AVOI, IND, PD and LTO is 0.2942, 0.2822, 0.3197,

-0.0974, -0.1644, 0.1132, -0.0684, -0.1445. It shows that BSZ, FEMALE, INDP\_DIR, MAS, Ind, PD and LTO have positive and MAS, UNC\_AVOI, PD and LTO have negative relation with LS (Ln of Assets). Here the sign of MAS, PD and LTO are opposite for both groups of developed and emerging countries.

Correlation matrix between governance variables and cultural dimensions of Hofstede's shows that BSZ and FEMALE, INDP\_DIR, MAS, UNC\_AVOI, IND, PD and LTO is 0.1799, 0.3946, 0.3784, 0.2036, 0.0838, 0.2532, 0.2555. BSZ have positive relation with female, INDP\_DIR, MAS, UNC\_AVOI, IND, PD and LTO. The difference in both groups appears in relation of BSZ with UNC\_AVOI where in emerging countries it has negative relation with BSZ. Number of female directors, INDP\_DIR and IND show negative relation with dual position of CEO as chairman which are opposite in sign as compared to emerging countries. Number of female directors shows the values of association between Female directors and INDP\_DIR, MAS, UNC\_AVOI, IND, PD and LTO is 0.372, -0.31, -0.3274, 0.2173, -0.358, -0.2626. Other than INDP\_DIR and IND all remaining variables have negative relation and rest two shows opposite relation with no of female directors. Other than INDP\_DIR all variables have inverse relation with female directors in both groups of developed and emerging countries.

Relation between INDP\_DIR and MAS, UNC\_AVOI, IND, PD and LTO is -0.0981, -0.5485, 0.5273, -0.5257 and -0.337. Above values describes that IND has positive relation with INDP\_DIR and MAS, PD and LTO while UNC\_AVOI depicts opposite sign. Other than IND rest of the factors show inverse sign of correlation in both groups. Correlation between MAS and UNC\_AVOI, IND, PD and LTO is 0.3826, 0.1973, 0.5096 and 0.7491 showing positive relation between MAS and other cultural dimensions contrary to the results of correlation between MAS and cultural dimensions of emerging countries where Ind and PD have negative relation. Correlation values of UNC\_AVOI and Ind, PD and LTO is -0.733, 0.9055 and 0.6957. UNC\_AVOI have opposite relation with PD and LTO and negative with IND. UNC\_AVOI and IND also have positive relation in emerging countries. Correlation table shows direct relation with PD and LTO with values of -0.7055, -0.0669, while both factors relation with PD and LTO is positive in emerging countries. while PD and LTO have positive relation with value 0.5918. This relation



is also negative in emerging countries.

In firm specific variable correlation values are too low to create any problem of multicollinearity other than the profitability and growth where this value is 0.81, rest of the values are below 0.31, these values are too low to create problem of multicollinearity, Correlation index values for governance variable as the maximum value here is 0.54 which is also lowered to create problem of multicollinearity, but the correlation is high between cultural variables MAS. UNC\_AVOI, PD, IND and LTO but these values are lower as compared to emerging countries. When significance of correlation for developed countries is checked through EViews, insignificant relation of leverage was observed with growth and tangibility, liquidity has no effect of growth and profitability and tangibility shows insignificant relation with no of female and masculinity.

#### **4.4.2 Regression Results for Developed and Emerging Economies**

##### **4.4.2.1 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 (3.13) is regressed through EGLS to explore the outcomes

Table (4.17,4.18) 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 affect 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

TABLE 4.17: Impact of Firm Specific Variables on Developed Countries

Variables	Coefficient	Std.Error	T-stat	Prob.
<b>C</b>	-0.0421	0.0277	-1.5189	0.1291
<b>LEVERAGE(-1)</b>	0.8325	0.0158	52.5815	0.0000
<b>CUR RATIO</b>	-0.0231	0.0061	3.8500	0.0003
<b>PROFITABILITY</b>	-0.3217	0.0207	-15.5254	0.0000
<b>TANGIBILITY</b>	0.0258	0.0105	2.4508	0.0144
<b>LS</b>	-0.0141	0.0045	-3.1399	0.0017
<b>GROWTH</b>	-0.0020	0.0006	-3.5296	0.0004
	Weighted Statistics		Unweighted Statistics	
<b>R-squared</b>	0.7860		0.8144	
<b>Mean dependent var</b>	2.7481		0.2079	
<b>Durbin-Watson stat</b>	1.8553		1.8170	
<b>F-statistic</b>	682.6315	<b>Prob(F-statistic)</b>		0.0000

TABLE 4.18: Impact of Firm Specific Variables on Emerging Countries

Variables	Coefficient	Std.Error	T-stat	Prob.
<b>C</b>	-0.0694	0.0302	-2.3016	0.0215
<b>LEVERAGE(-1)</b>	0.8580	0.0478	17.9543	0.0000
<b>CUR RATIO</b>	-0.0010	0.0031	-0.3285	0.7426
<b>PROFITABILITY</b>	-0.0405	0.0243	-1.6644	0.0963
<b>TANGIBILITY</b>	0.0425	0.0219	1.9393	0.0527
<b>LS</b>	0.0099	0.0043	2.3187	0.0206
<b>GROWTH</b>	-0.0035	0.0090	-0.3819	0.7026
	Weighted Statistics		Unweighted Statistics	
<b>R-squared</b>	0.8134		0.7225	
<b>Mean dependent var</b>	0.1809		0.1551	
<b>Durbin-Watson stat</b>	2.1998		2.4651	
<b>F-statistic</b>	858.9105	<b>Prob(F-statistic)</b>		0.0000

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 trade off 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 the 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 size 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.

#### **4.4.2.2 Impact of Corporate Governance on Capital Structure of Developed and Emerging Countries**

Model 3.18 regressed the variables of Developed and Emerging group separately. Following results depicts the effect of Governance on Capital structure in both groups.

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 has significant effect on capital

TABLE 4.19: Impact of Governance on Capital Structure of Developed Countries

Variables	Coefficient	Ttd.Error	T.Stat	Prob.
<b>C</b>	-0.0449	0.0360	-1.2481	0.2123
<b>LEVERAGE(-1)</b>	0.8297	0.0213	38.8941	0.0000
<b>CUR RATIO</b>	0.0032	0.0029	1.0913	0.2754
<b>PROFITABILITY</b>	-0.3196	0.0437	-7.3198	0.0000
<b>TANGIBILITY</b>	0.0273	0.0107	2.5545	0.0108
<b>LS</b>	0.0121	0.0057	2.1166	0.0345
<b>GROWTH</b>	0.0020	0.0008	2.6587	0.0080
<b>B.SIZE</b>	0.0010	0.0003	3.1030	0.0020
<b>FEMALE</b>	-0.0005	0.0017	-0.2834	0.7769
<b>IND DIR</b>	0.0003	0.0009	0.3334	0.7389
	Weighted Statistics		Unweighted Statistics	
<b>R-squared</b>	0.7870		0.8159	
<b>Mean dependent var</b>	2.7527		0.2072	
<b>Durbin-Watson stat</b>	1.8588		1.7973	
<b>F-statistic</b>	858.9105	<b>Prob(F-statistic)</b>		0.0000

TABLE 4.20: Impact of Governance on Capital Structure of Emerging Countries

Variables	Coefficient	Ttd.Error	T.Stat	Prob.
<b>C</b>	-0.0653	0.0251	-2.6018	0.0094
<b>LEVERAGE(-1)</b>	0.8535	0.0123	69.3778	0.0000
<b>CUR RATIO</b>	0.0019	0.0023	0.8420	0.4000
<b>PROFITABILITY</b>	-0.0376	0.0132	-2.8430	0.0045
<b>TANGIBILITY</b>	0.0453	0.0113	4.0231	0.0001
<b>LS</b>	0.0090	0.0036	2.5219	0.0118
<b>GROWTH</b>	-0.0002	0.0005	-0.4953	0.6205
<b>B.SIZE</b>	0.0004	0.0001	2.7048	0.0069
<b>FEMALE</b>	-0.0043	0.0021	-2.0476	0.0758
<b>IND DIR</b>	0.0029	0.0011	2.7284	0.0065
	Weighted Statistics		Unweighted Statistics	
<b>R-squared</b>	0.8142		0.7237	
<b>Mean dependent var</b>	0.1811		0.1551	
<b>Durbin-Watson stat</b>	2.1965		2.4615	
<b>F-statistic</b>	573.9728	<b>Prob(F-statistic)</b>		0.0000

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 \(2007\)](#); [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 aligned with the results of [Carter and 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 inconsistency with the above notion that leverage of the firm will increase with the more no of outside directors.

From the comparison of developed and emerging countries governance variables, board size, no of female directors and outside directors' affect 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 affect their capital decision.

#### 4.4.2.3 Impact of Culture on Capital Structure of Developed and Emerging Countries

Above mentioned relation between the variables is regressed through equation (3.20) for developed and emerging groups in two separate sets.

TABLE 4.21: Impact of Culture on Capital Structure of Developed Countries

Variable	Coefficient	Std. Error	T-Stat	Prob.
C	-0.0408	0.0453	-0.9001	0.3682
LEVERAGE(-1)	0.8268	0.0241	34.2532	0.0000
CUR_RATIO	0.0032	0.0017	1.8903	0.0590
PROFITABILITY	-0.3184	0.0861	-3.7004	0.0002
TANGIBILITY	0.0270	0.0121	2.2295	0.0260
LS	0.0128	0.0073	1.7673	0.0774
GROWTH	0.0020	0.0008	2.4732	0.0135
B_SIZE	0.0013	0.0013	0.9787	0.3279
FEMALE	0.0004	0.0019	0.1937	0.8464
INDP_DIR	-0.0017	0.0004	-3.7632	0.0002
MAS	0.0008	0.0001	5.6929	0.0000
UNC AVOI	0.0003	0.0001	3.0000	0.0001
PD	-0.0014	0.0003	-4.5862	0.0000
IND	-0.0021	0.0023	-0.9130	0.3775
	Weighted Statistics		Unweighted Statistics	
R-squared	0.7869		0.8159	
Mean dependent var	2.7486		0.2072	
Durbin-Watson stat	1.8581		1.8581	
F-statistic	371.5959			
Prob(F-statistic)	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 affect is significant in emerging economy but insignificant for developed. Although the 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.

TABLE 4.22: Impact of Culture on Capital Structure of Emerging Countries

Variable	Coefficient	Std. Error	T-Stat	Prob.
<b>C</b>	0.2628	0.1409	1.8647	0.0625
<b>LEVERAGE(-1)</b>	0.8439	0.0282	29.8901	0.0000
<b>CUR_RATIO</b>	0.0011	0.0005	1.9065	0.0568
<b>PROFITABILTY</b>	-0.0294	0.0058	-5.0429	0.0000
<b>TANGIBILITY</b>	0.0286	0.0055	5.1337	0.0000
<b>LS</b>	0.0061	0.0039	1.5614	0.1187
<b>GROWTH</b>	0.0001	0.0001	1.3893	0.1650
<b>B_SIZE</b>	0.0005	0.0002	2.4525	0.0143
<b>FEMALE</b>	0.0025	0.0054	0.4583	0.6468
<b>INDP_DIR</b>	-0.0002	0.0013	-0.1549	0.8769
<b>MAS</b>	-0.0041	0.0019	-2.2145	0.0270
<b>UNC AVOI</b>	-0.0015	0.0006	-2.4937	0.0128
<b>PD</b>	-0.0496	0.0229	-2.1917	0.0308
<b>IND</b>	-0.0022	0.0010	-2.1619	0.0286
	Weighted Statistics		Unweighted Statistics	
<b>R-squared</b>	0.8146		0.7264	
<b>Mean dependent var</b>	0.1806		0.1551	
<b>Durbin-Watson stat</b>	2.1896		2.4556	
<b>F-statistic</b>	470.2302			
<b>Prob(F-statistic)</b>	0.0000			

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

TABLE 4.23: Summary of Cultural Dimensions on Capital Structure in Developed and Emerging Countries

HOFD	MEC	MDC	$\beta_E$	$\beta_D$
<b>MAS</b>	53.40	41.84	-ve	+ve
<b>Unc_avoi</b>	53.31	67.96	-ve	+ve
<b>PD</b>	68.96	46.35	-ve	-ve
<b>IND</b>	28.32	62.39	-ve	+ve

Whereas, HOFD refers to Hofstede dimension, MEC refers to Mean for Emerging countries, MDC refers to Mean for Developed countries,  $\beta_E$  refers to Beta in Emerging,  $\beta_D$  refers to Beta in developed

From the table 4.23 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 elaborated by [Jayachandran \(2015\)](#) 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. \(2002\)](#); [Lin and Fu \(2017\)](#); [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 value of masculinity is higher in developed countries and this group shows positive relation with leverage ,previous research findings of [Chen and Chen \(2012\)](#); [Boubakri and Saffar \(2016\)](#); [Willeminck \(2018\)](#) 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 managers 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



other's 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 Esqueda \(2014\)](#); [Boubakri and Saffar \(2016\)](#); [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 and Goodell \(2009\)](#); [Zheng et al. \(2012\)](#); [Wang and Esqueda \(2014\)](#); [Boubakri and 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 and Goodell \(2009\)](#); [Zheng et al. \(2012\)](#); [Wang and Esqueda \(2014\)](#); [Boubakri and 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.

Hofstede's 5th cultural dimension is LTO, as the above table shows emerging countries have higher mean values of LTO, Díez-Esteban et, al. (2019) also found positive relation between LTO and leverage and vice versa. Societies with higher values of LTO are more future oriented and for expansion purpose they acquire lower cost financing, so they include more debt in their capital showing positive relation with debt and LTO.

## 4.5 Impact of Culture on Capital Structure of Asia and Europe

In this chapter sample countries have been categorized in to two groups i.e., Asia and Europe to investigate the effect of culture on their financial decision. As both groups have different values and show diversity in their life spending behavior. In the following chapter, it will be investigated that these difference in behaviors also persists in their financial decisions or not. For this comparison samples countries in Asian group include Pakistan, India, Bangladesh and Turkey while Italy, Finland, Spain and Norway are the part of European group.

Fifty companies from each country are selected with respect to highest market capitalization in the fiscal year 2016. The final sample consisted of 3610 firm-s/year observations of 300 companies for the period 2006–2016. Independent firm specific 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 (natural

log of size). Proxy for size of business used for this research is market capitalization of the firm.

Furthermore, data related to corporate governance variables such as board size, dual position of CEO as Director, number of female directors, no of independent directors and presence of foreign directors are collected from the annual reports of the firms on year-to-year bases. Apart from that, Hofstede's cultural dimensions i.e., power distance, individualism, masculinity, uncertainty avoidance, long term orientation and indulgence are considered for the analysis. All values range from 0 to 100, with higher scores indicating more influence of a specific variable in a specific country.

The collected data is analyzed through E-Views by using descriptive statistics, correlation matrix and regression analysis. Panel EGLS (Cross-section weights) is used to explore the effect of firm specific factors, governance and cultural variables in choice of capital structure. By comparing the results, it can be generalized that these variables depict country effect or not.

TABLE 4.24: Descriptive Statistics for Asian Countries

<b>VARIABLES</b>	<b>Mean</b>	<b>Median</b>	<b>Maximum</b>	<b>Minimum</b>
<b>LEVERAGE (-1)</b>	0.1534	0.0990	2.4030	0.0000
<b>CUR_RATIO</b>	1.6650	1.3600	17.4000	0.1400
<b>PROFITABILITY</b>	0.1361	0.1113	4.8254	-0.3253
<b>TANGIBILITY</b>	0.4032	0.3986	0.9900	0.0124
<b>LS</b>	7.2175	7.2548	9.2327	4.9636
<b>GROWTH</b>	4.2721	2.1100	80.5500	0.0100
<b>BSZ</b>	8.7135	8.0000	18.0000	3.0000
<b>DIR_CEO</b>	0.1227	0.0000	1.0000	0.0000
<b>FEMALE</b>	0.5093	0.0000	5.0000	0.0000
<b>INDP DIR</b>	2.4406	2.0000	11.0000	0.0000
<b>FRGN DIR</b>	0.3372	0.0000	1.0000	0.0000
<b>MAS</b>	51.4123	50.0000	56.0000	45.0000
<b>UAI</b>	63.1117	70.0000	85.0000	40.0000
<b>IND</b>	30.3821	37.0000	48.0000	14.0000
<b>PD</b>	72.0000	71.5000	80.0000	65.0000
<b>LTO</b>	48.5000	48.5000	51.0000	46.0000
<b>INDLG</b>	23.7500	23.0000	0.0000	49.0000

Table 4.24 shows the descriptive data of Asian companies' specific variables, governance and cultural dimension. Control variables such as leverage (-1) shows that firms on average 15.33% depends on its previous year debt with median 9.9%, the maximum value of leverage (-1) is 240% while the minimum value is 0 with standard deviation of 19.45%. Current ratio shows that on average firms have 1.66:1 to cover its short-term debt, median 1.36:1 closer to mean but the difference between the maximum and minimum value is high. Maximum value is 17.4 :1 while minimum value is 0.14:1, standard deviation is 1.20. For profitability the average profit of the firm is 13.61% approaching median 11.13% but again here the difference of maximum and minimum is wider, 482% maximum with a loss of 32.53 % minimum having standard deviation of 16.09 %. The average value of tangibility to total assets is 40.32%, median 39.87 %, Maximum value 99% and lower value 1.24% with standard deviation 21.72%. Log of the Market capitalization is used as the proxy of Size of business which have highest average value of 7.2175 and mean 7.2548 .The maximum point is 8.23 with minimum value 4.9636 with standard deviation of 77.05%. With largest size these firms shows larger values of growth such as on average the growth rate of MV to BV is 427.21% with median 211%. there is wider difference of maximum and minimum ranging from 211 to -32.15 standard deviation is 28.48.

Descriptive statistics about governance variables shows that on average Asian board has 8 members which is equal to the median value. Maximum directors on board are 18 in Asia with minimum no of 3. The standard deviation is 2.81 .On average 12% CEO holds dual position. its dummy variable so maximum and minimum ranges between 1 to 0. In Asia due to masculinity fewer females are present in governance.. On average Asian firms have approximately 5 females but on other side median value is 0 with maximum 5 female members and 0.00 as a minimum number of females. Standard deviation value is 77.77%. on average Asian firms have 2 independent directors with median 2, Maximum no of independent directors in Asian countries are 11 and minimum 0 with 47.29% standard deviation. In Asia nearly 33.33% firms employ foreign directors in their management , maximum no of foreign directors are 1 and minimum 0 with standard deviation value is 47.29%.

Three cultural dimensions i.e., Masculinity, uncertainty Avoidance and individualism of Hofstede (1980,2001) are used in this chapter for analysis of Europe and Asia. Mean value of Masculinity shows value higher than 50 (51.41) which shows there is slightly dominance of male over female and females have less power in working environment. Median value is 50, Maximum value is 56 while the minimum value of MAS is 45 with standard deviation of 4.32. Mean value of uncertainty avoidance is 63.11 with median 70. Maximum value is 85 and minimum value is 40 with deviation of 16.89. Individualism shows mean value of 30 with median 37. Maximum value is 48 while the lower value is 14 with standard deviation of 14.15.

TABLE 4.25: Descriptive Statistics of European Countries

VARIABLES	Mean	Median	Maximum	Minimum
<b>CUR_RATIO</b>	1.477	1.260	10.170	0.130
<b>PROFITABILITY</b>	0.065	0.072	0.598	-4.022
<b>TANGIBILITY</b>	0.295	0.230	0.990	0.010
<b>LS</b>	6.443	6.377	8.731	3.931
<b>GROWTH</b>	2.924	2.050	94.950	-32.150
<b>BSZ</b>	9.586	9.000	21.000	4.000
<b>DIR_CEO</b>	0.122	0.000	1.000	0.000
<b>FEMALE</b>	1.676	2.000	14.000	0.000
<b>INDP DIR</b>	5.468	5.000	17.000	0.000
<b>FRGN DIR</b>	0.510	1.000	2.000	0.000
<b>MAS</b>	38.204	42.000	70.000	8.000
<b>UAI</b>	68.703	75.000	86.000	50.000
<b>IND</b>	64.173	63.000	76.000	51.000
<b>PD</b>	42.750	41.500	57.000	31.000
<b>LTO</b>	45.500	43.000	61.000	35.000
<b>INDLG</b>	46.500	49.500	57.000	30.000

Above table shows the descriptive data of European company specific variables, governance and cultural dimension. Control variables such as leverage (-1) has on long-term debt of previous year as 55.92% with median 19.82%, the maximum value of leverage (-1) is 80% while the minimum value is 0.00%. Current ratio shows 1.47:1 mean value, median 1.26 closer to mean but the difference between the maximum and minimum value is high. Maximum value is 10.17 while minimum value is 0.13, standard deviation is 86.09%. For profitability the average profit

w.r.t total assets of the firm is 6.47% approaching median 7.42% but again here the difference of maximum and minimum is wider, 59.76% maximum with loss of -402.17% , standard deviation 21.75%. The average value of tangibility is 29.54% with respect to total assets ,median 22.97%,Maximum value is 99 % and lower value 1% with standard deviation 23.07%.Size of business have highest average value of 6.44 and mean.

The maximum point is 8.7311with minimum value 3.9314 with standard deviation of 66.6%.the values of this variable is high because we had sampled our data on the bases of 50 largest firms with respect to market capitalization which is used as proxy of size of business. on average the growth rate is 292.35% with median 205%.there is wider difference of maximum and minimum ranging from 94.95 to -105 .25. standard deviation is 10.56. This shows that European countries have higher tendency of long-term debt and better liquidity, but are less profitable, keep less noncurrent assets and are smaller in size of business as compared to Asia.

Descriptive statistics about governance variables shows that on average board has 9 members which is equal to the median value.Maximum directors on board are 21 in Europe with minimum no of 4.the standard deviation is 3.246.on average 12% CEO holds dual position.its dummy variable so maximum and minimum ranges between 1 to 0. Presence of females tells about the gender diversity.On average European firms have approximately 2 females which is also the value of median.with maximum 14 female members and no one as a minimum number.standard deviation value is 1.30. on average european firm have 5 independent directors with median 5, maximum 17 and minimum 0 no of independent directors.In europe nearly 51% firms employ foreign directors in their management ,maximum no of ou is 2 and minimum is 1.standard deviation value is 51.3%.From descriptive data it is clear that governance of european countries are better as compare to Asia,as the board size,ratio of female,independent and foreign directors have greater number in europe than Asia.Which increases the efficiency and transparency of board resulting in better liquidity and utilization of long term debt.

Mean value of Masculinity shows value lower than 50 (38.20) which shows there is less dominance of male over female and females have equal power in working environment. Median value is 42, Maximum value is 70 while the minimum value

TABLE 4.26: Correlation Matrix for Asian Countries

	LEV	CUR	PROF	TANG	Grow	B_SIZE	chair_ceo	FEMALE	INDP_DIR	frgn_dir	MAS	Unc_Avoi	ind
<b>LEV</b>	1												
<b>CUR</b>	-0.1273	1											
<b>PROF</b>	0.0642	0.2828	1										
<b>TANG</b>	0.3287	-0.2204	-0.107	1									
<b>LS</b>	0.0834	-0.0122	0.1556	0.1331									
<b>Grow</b>	0.0637	-0.0208	0.0171	0.045	1								
<b>B_SIZE</b>	0.0883	-0.1286	-0.0816	0.0519	-0.0416	1							
<b>chair_ceo</b>	0.0761	-0.0695	-0.0573	0.0266	-0.0012	0.2426	1						
<b>FEMALE</b>	-0.0406	0.073	-0.0172	-0.0404	-0.0145	0.0661	0.032	1					
<b>INDP_DIR</b>	0.1238	-0.1384	-0.1147	0.0396	-0.0199	0.5217	0.3459	0.0324	1				
<b>frgn_dir</b>	-0.1936	0.0083	0.1012	-0.168	0.0138	0.0199	-0.0472	-0.1457	-0.0954	1			
<b>MAS</b>	0.1518	-0.1237	0.0281	0.2413	0.0215	0.1553	0.2339	-0.1688	0.4097	-0.0837	1		
<b>Unc_Avoi</b>	-0.1902	0.1618	0.0216	-0.2214	-0.0249	-0.2482	-0.303	0.1664	-0.5699	0.1018	-0.9457	1	
<b>Ind</b>	0.1655	-0.143	-0.1923	0.0012	0.0181	0.3514	0.1833	0.0385	0.6664	-0.165	0.2319	-0.4728	1

MAS is 8 with standard deviation of 21.73. Mean value of uncertainty avoidance is 68.70 with median 75. Maximum value is 86 and minimum value is 50 with deviation of 13.51. Individualism shows mean value of 64.17 with median 63. Maximum value is 76 while the lower value is 51 with standard deviation of 9.33. On comparison of both groups mean values it is clear that European countries have more believe in equality of men and women, show more concern to deal with uncertainty avoidance and are more individualistic.

Above table shows correlation matrix of Asian countries.it shows that in Asian countries correlation between leverage (-1) and cur\_ratio, profitability, tangibility, ls, growth b\_size, chair\_ceo, female, Indp\_dir, frgn\_dir MAS, Unc\_avoi, and Ind is -0.1273, 0.0642, 0.3287, 0.0834, 0.0637, 0.0883, 0.0761, -0.0406, 0.1238, -0.1936, 0.1518, -0.1902 and 0.1655. leverage (-1) shows positive relation with profitability, tangibility, ls, growth b\_size, chair\_ceo, Indp\_dir, MAS, and Ind while negative with current ratio, no of female directors, foreign directors and uncertainty avoidance. Liquidity indicator current ratio and firm specific variables i.e., profitability, tangibility size of business and growth have values of (0.2828, -0.2204, -0.0122 and -0.0208 respectively. The correlation value of current ratio with governance variables i.e., board size, chairman as CEO, no of female directors' independent directors and foreign directors is (-0.1286, -0.0695, 0.073, -0.1384 and 0.0083, respectively.

The correlation of current ratio with cultural dimensions, Masculinity, uncertainty avoidance and individualism are -0.1237, 0.1618 and -0.143). These values shows that in Asian countries shows increasing relation between liquidity and profitability, no of female and foreign directors and Unc\_avoi while negative with tangibility, ls, growth b\_size, chair\_ceo, Indp\_dir, MAS, and Ind .Correlation between profitability and tangibility, size of business (ls), growth, board size, chairman as CEO, no of female directors' independent directors and foreign directors, Masculinity, uncertainty avoidance and individualism are -0.107, 0.1556, 0.0171 , -0.0816, -0.0573, -0.0172, -0.1147, 0.1012, 0.0281, 0.0216 and -0.1923) respectively. Association between profitability and size of business (ls), growth, frgn\_dir MAS and Unc\_avoi is direct in this group of Asian countries while profitability shows negative relation with tangibility, b\_size, chair\_ceo, female, Indp\_dir and IND.



Relationship between tangibility and size of business, growth, board size, chairman as CEO, no of female directors,' independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are 0.1331, 0.045, 0.0519, 0.0266, -0.0404, 0.0396, -0.168, 0.2413, -0.2214 and 0.0012, respectively. Here the association is in direct proportion with size of business, growth, board size, chairman as CEO, independent directors, Masculinity and individualism while inverse with rest of the factors under study. Correlation values between size of business and growth, board size, chairman as CEO, no of female directors,' independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are 0.044, 0.2756, 0.2626, -0.1346, 0.2329, 0.0418, 0.5339, -0.5278 and 0.0249, respectively. Other than female directors and uncertainty avoidance all other variables have positive connection with size of business.

Relationship between growth and board size, chairman as CEO, no of female directors,' independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are -0.0416, -0.0012,-0.0145, -0.0199, 0.0138, 0.0215, -0.0249 and 0.0181 respectively.it is clear from the values that foreign directors, masculinity and individualism show positive relation with growth and board size, chairman as CEO, no of female directors,' independent directors and uncertainty avoidance have decreasing trend with growth of business. Correlation values between board size and chairman as CEO, no of female directors,' independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are 0.2426, 0.0661, 0.5217, 0.0199, 0.1553, -0.2482 and 0.3514, respectively.

Increasing board members have direct relation with chairman as CEO, no of female directors,' independent directors, foreign director, Masculinity and individualism while negative with, uncertainty avoidance. Correlation values between chairman as CEO and no of female directors,' independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are 0.032, 0.3459, -0.0472, 0.2339, -0.303, 0.1833, respectively. chairman as CEO have direct association with no of female directors,' independent directors, Masculinity and individualism and negative with foreign directors and uncertainty avoidance. Association between no of female directors,' independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are 0.0324, -0.1457, -0.1688, 0.1664 and

TABLE 4.27: Correlation Matrix for European Countries

	LEV	CUR	PROF	TANG	Grow	B_SIZE	chair_ceo	FEMALE	INDP_DIR	frgn_dir	MAS	Unc_Avoi	ind
<b>LEV</b>	1												
<b>CUR</b>	-0.094	1											
<b>PROF</b>	-0.0686	0.0468	1										
<b>TANG</b>	-0.0242	-0.1608	0.0206	1									
<b>LS</b>	-0.1078	0.034	0.1913	0.1772									
<b>Grow</b>	-0.0226	-0.0019	-0.0441	-0.0488	1								
<b>B_SIZE</b>	0.1059	-0.1925	-0.0155	0.0323	0.0655	1							
<b>chair_ceo</b>	-0.0243	-0.0344	0.018	-0.0046	-0.0292	0.2596	1						
<b>FEMALE</b>	-0.0936	0.1193	-0.034	-0.0208	0.0886	0.0575	-0.1332	1					
<b>INDP_DIR</b>	-0.0093	0.0107	-0.1324	0.0867	0.0021	0.2182	-0.0908	0.3133	1				
<b>frgn_dir</b>	0.0666	-0.0936	-0.0776	0.0574	0.0308	0.1015	0.0898	0.1184	0.1497	1			
<b>MAS</b>	0.1037	-0.1894	0.0992	-0.0678	0.0025	0.4298	0.166	-0.368	-0.2267	-0.1698	1		
<b>Unc_Avoi</b>	0.0363	-0.267	0.1081	0.0594	0.0386	0.6214	0.3655	-0.3471	-0.267	-0.0058	0.6971	1	
<b>Ind</b>	0.0857	0.1429	-0.0536	-0.1435	-0.0442	-0.2292	-0.2563	0.0589	0.0433	-0.1855	0.3067	-0.4409	1

0.0385. Number of female directors have positive association with independent director, uncertainty avoidance and individualism while negative with foreign directors and MAS. Correlation values between independent directors and foreign directors, Masculinity, uncertainty avoidance and individualism are -0.0954, 0.4097, -0.5699 and 0.6664. Here the relation between MAS and IND is in direct proportion and vice versa for foreign directors and uncertainty Avoidance. Correlation values between foreign director and Masculinity, uncertainty avoidance and individualism are -0.0837, 0.1018 and -0.165. This relation is positive for Unc\_avoi and negative for other two variables. Correlation values between Masculinity and uncertainty avoidance and individualism are -0.9457 and 0.2319, direct with individualism and inverse with Unc\_avoi. Correlation values between uncertainty avoidance and individualism is -0.4728.

Above table shows correlation matrix of European countries.it shows that in European countries correlation between leverage (-1) and cur\_ratio, profitability, tangibility, ls, growth b.size, chair\_ceo, female, Indp\_dir, frgn dir MAS, Unc\_avoi, and Ind is -0.094, -0.0686, -0.0242 , 0.1078, -0.0226, 0.1059, -0.0243, -0.0936, -0.0093, 0.0666, 0.1037, 0.0363 and 0.0857. leverage (-1) shows direct relation with b.size, frgn dir MAS, Unc\_avoi, and Ind its relationship with cur\_ratio, profitability, tangibility, ls, growth, chair\_ceo, female, Indp\_dir is found negative in European countries.By comparing the correlation matrix of Asian and European countries results its clearer that current ratio, profitability, tangibility, ls, growth, chair\_ceo, Indp\_dir have opposite relation in European countries with leverage(-1) but positive in Asian group.

On the other side foreign directors have positive relation with leverage (-1) in European group but negative in Asian. Current ratio and firm specific variables i.e., profitability, tangibility size of business and growth have values of (0.0468, -0.1608, 0.034,-0.0019) respectively. The correlation value of current ratio with governance variables i.e., board size, chairman as CEO, no of female directors' independent directors and foreign directors have correlation values as (-0.1925, -0.0344, 0.1193, 0.0107 and -0.0936) respectively. Association of current ratio with cultural dimensions Masculinity, uncertainty avoidance and individualism are (-0.1894, -0.267, 0.1429). From the correlation values it is observable profitability,

LS, no of female and independent directors have positive association with liquidity ratio and other variables such as tangibility, growth, b\_size, chair\_ceo, foreign directors, MAS, Unc\_avoi and IND have inverse relation with liquidity. On comparison of the both groups opposite signs are observed such as LS, Indp\_dir and IND have positive relation with liquidity in European group but negative in Asian, also foreign directors and Unc\_avoi have negative sign in European but positive in Asian.

Correlation between profitability and tangibility, size of business, growth, board size, chairman as CEO, no of female directors' independent directors and foreign directors, Masculinity, uncertainty avoidance and individualism are (0.0206, 0.1913, -0.0441, -0.0155, 0.018, -0.034, -0.1324, -0.0776, 0.0992, 0.1081 and -0.0536) respectively. The relation of profitability with Tangibility and Chair\_ceo is positive in Europe but negative in Asia and signs of growth and foreign dir is negative in Europe but positive in Asia. Correlation values between tangibility and size of business, growth, board size, chairman as CEO, no of female directors,' independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are (0.1772, -0.0488, 0.0323, -0.0046, -0.0208, 0.0867, 0.0574, -0.0678, 0.0594, -0.1435) respectively.

Here the inverse relation between Asia and Europe can be observed for the variables such as growth, chair\_ceo, foreign directors, MAS, Unc\_avoi and IND. Correlation values between size of business (ls) and growth, board size, chairman as CEO, no of female directors,' independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are (0.0246, 0.2221, 0.0258, 0.3442, 0.2362, 0.0514, -0.1573, -0.0835, 0.0319) respectively.

Size of firm have opposite relation with no of female directors and MAS in both groups, no of female directors are directly related to LS in Europe but show negative sign in Asia and vice versa for MAS. Correlation values between growth and board size, chairman as CEO, no of female directors,' independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are 0.0655, -0.0292, 0.0886, 0.0021, 0.0308, 0.0025, 0.0386 and -0.0442, respectively. Growth show increasing trend with b\_size, no of female directors, Indp\_dir, and Unc\_avoi

in Europe but decreasing trend in Asia, for IND this relation is negative in Europe but positive in Asia. Correlation table depicts values between board size and chairman as CEO, no of female directors, independent directors, foreign director, Masculinity, uncertainty avoidance and individualism as 0.2596, 0.0575, 0.2182, 0.1015, 0.4298, 0.6214, -0.2292, respectively.

Increase in board size increase Unc\_avoi in Europe but lower Unc\_avoi in Asia and vice versa for IND in both groups. Relationship between chairman as CEO and no of female directors, independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are -0.1332, -0.0908, 0.0898, 0.166, 0.3655 and -0.2563 respectively. In European group association between foreign director and Unc\_avoi is observed positive with chair\_ceo but these variables show negative sign with chair\_ceo in Asia, contrary to this non of the female and independent directors and IND show a negative relation with chair\_ceo in Europe but a positive in Asia.

Correlation values between no of female directors, independent directors, foreign director, Masculinity, uncertainty avoidance and individualism are 0.3133, 0.1184, -0.368, -0.3471 and 0.0589. With increase in no of female directors increases, foreign directors also increase in Europe, but it will decrease in Asia. With increase in female directors Unc\_avoi decreases in Europe but increases in Asia.

Correlation values between independent directors and foreign directors, Masculinity, uncertainty avoidance and individualism are 0.1497, -0.2267, -0.267 and 0.0433. With increase in Indp\_dir in Europe more foreign directors will be appointed but in Asia there is decreasing trend for the hiring of foreign directors by increase in independent directors, Masculine culture also decrease with increased no of Indp\_dir in Europe but vice versa for Asia.

Correlation values between foreign director and Masculinity, uncertainty avoidance and individualism are -0.1698, -0.0058 and -0.1855. In Europe increased no of foreign directors lower the uncertainty but in Asia it increases. Correlation values between Masculinity and uncertainty avoidance and individualism are 0.6971, 0.3067. Relation of MAS with Unc\_avoi is opposite in both groups. Correlation

values between the uncertainty avoidance and individualism is -0.4409.

By Comparing the correlation matrix of Asia and Europe it can be observed that most of the variables have opposite relation in both groups emphasizing on this point there is a hidden factors in both group due to which same variables behaves contrarily in different demographics.

#### 4.5.1 Effect of Company Specific Factors on Capital Structure

The above-mentioned equation shows the debt/equity leverage ratio where EUR shows the difference of Europe and Asia. LVG (-1) is lag of debt which explains the dependency of leverage on its previous value. CUR depict current assets/current liability of firm  $i$  at time  $t$ , GRW represent growth of firm, PROF1 depicts return on assets of firm  $i$  at time  $t$ , growth depicts  $MV / BV$  of firm  $i$  at time  $t$ , TANG depicts tangibility (Fixed Assets/Total Assets) of firm  $i$  at time  $t$ , LS is log of the size of firm, depicts error term.

From the above table independent variables such as leverage (-1), tangibility and Profitability show significant results both groups, which means that these factors have same importance in both groups at the time of financial decision, with increase in size of previous debt, more noncurrent assets and higher rate of return firms are confident in taking loan. These findings are consistent with the Leverage of previous years have positive and significant affect for both groups which shows confidence of manager that with more debt they have advantage of tax shield and share less profit with creditors in term of interest so their priority in capital choice is inclusion of more debt in their capital.

Tangibility shows consistent findings with trade off theory explaining that firms having larger size with more tangible assets for collateral, take its advantage and incorporate more leverage in their capital. [Rajan and Zingales \(1995\)](#); [Michaelas et al. \(1999\)](#); [Bevan and Danbolt \(2002\)](#); [Huang et al. \(2006\)](#); [Lemmon et al. \(2008\)](#) found same results for tangibility. Profitability depicts negative relation which is aligned with Pecking Order Theory that profitable firm's 1st preference is retained

TABLE 4.28: Impact of Firm Specific Factors on Capital Structure (Asia VS Europe)

Variables	Coefficient	Std.Error	t.statistics	P value
<b>C</b>	0.0235	0.0076	3.1093	0.0019
<b>LVG ASIA(-1)</b>	0.8544	0.0339	25.2287	0.0000
<b>LVG EUR(-1)</b>	0.8685	0.0200	43.4687	0.0000
<b>CUR RATIO ASIA</b>	0.0006	0.0023	0.2688	0.7881
<b>CUR RATIO EUR</b>	0.0061	0.0032	1.9133	0.0558
<b>PROFITABILITY ASIA</b>	-0.0495	0.0237	-2.0878	0.0369
<b>PROFITABILITY EUR</b>	-0.1124	0.0318	-3.5374	0.0004
<b>TANGIBILITY ASIA</b>	0.0299	0.0155	1.9304	0.0537
<b>TANGIBILITY EUR</b>	0.0204	0.0106	1.9233	0.0546
<b>LS ASIA</b>	-0.0031	0.0022	-1.4208	0.1555
<b>LS EUR</b>	-0.0046	0.0024	-1.9730	0.0486
<b>GROWTH ASIA</b>	-0.0001	0.0008	-0.0922	0.9266
<b>GROWTH EUR</b>	0.0007	0.0013	0.5029	0.6151
	Weighted Statistics		Unweighted Statistics	
<b>R-squared</b>	0.7988		0.7478	
<b>Mean dependent var</b>	0.1787		0.1638	
<b>Durbin-Watson stat</b>	2.2095		2.3524	
<b>F-statistic</b>	784.5111			
<b>Prob(F-statistic)</b>	0.0000			

earnings ,2nd equity and then they acquire debt. This result is consistent with the findings of (Rajan and Zingales, 1995; Fama and French, 2002; Chen, 2004; Frank and Goyal, 2009; Sheikh and Wang, 2011).

Growth shows insignificant results for both groups which means in presence of larger size, more tangible assets and profitability firms ignore about their liquidity position and growth in MV/BV. Which is explicable that creditors have self-assurance of their lending in term of collateral, so they ignore these values. In Asia Liquidity and (ls) size of business shows significant results but insignificant for Europe. It means Asian countries have lower information symmetry, consistent with the findings of Rajan and Zingales (1995) study of G-7 where they found negative relation for size of business in some countries arguing that due to lower flow of knowledge and data larger firms prefer equity over debt.in Europe its insignificant so again it becomes debatable that why same factor have different effect on both groups.

## 4.5.2 Corporate Governance and Leverage Decision

Along with the firm specific factors discussed in equation 1, above mentioned equation includes governance variables such as BSZ, which is the total number of board members, DIR\_CEO shows dual position of CEO as director, no of female directors 'FEMALE', no of outside directors 'INDP DIR' and presence of foreign director 'FRGN DIR'.

TABLE 4.29: Impact of Governance Variables on Capital Structure (Asia vs Europe)

Variables	Coefficient	Std.Error	t.statistics	P value
C	0.8544	0.0339	25.2287	0.0000
LVG ASIA(-1)	0.8481	0.0349	24.3171	0.0000
LVG EUR(-1)	0.8676	0.0208	41.7809	0.0000
CUR RATIO ASIA	0.0011	0.0023	0.4641	0.6426
CUR RATIO EUR	0.0063	0.0032	1.9877	0.0470
PROFITABILITY ASIA	-0.0445	0.0232	-1.9169	0.0554
PROFITABILITY EUR	-0.1153	0.0323	-3.5729	0.0004
TANGIBILITY ASIA	0.0309	0.0158	1.9608	0.0500
TANGIBILITY EUR	0.0209	0.0111	1.8716	0.0614
LS ASIA	0.0007	0.0026	0.2652	0.7909
LS EUR	0.0051	0.0026	1.9174	0.0553
GROWTH ASIA	0.0001	0.0008	0.0876	0.9302
GROWTH EUR	0.0007	0.0013	0.5229	0.6011
BSZ ASIA	0.0023	0.0008	2.7788	0.0055
BSZ EUR	-0.0027	0.0008	-3.3569	0.0008
DIR_CEO ASIA	-0.0025	0.0036	-0.7037	0.4817
DIR_CEO EUR	0.0033	0.0017	1.8725	0.0612
FEMALE ASIA	-0.0016	0.0008	-1.9432	0.0521
FEMALE EUR	-0.0009	0.0008	-1.0526	0.2926
INDP DIR ASIA	0.0011	0.0003	3.3804	0.0007
INDP DIR EUR	-0.0070	0.0040	-1.9013	0.0573
FRGN DIR ASIA	-0.0019	0.0010	-1.8858	0.0594
FRGN DIR EUR	0.0001	0.0022	0.0785	0.9374
		Weighted Statistics	Unweighted Statistics	
R-squared	0.7990		0.7495	
Mean dependent var	0.1784		0.7495	
Durbin-Watson stat	2.2064		0.7495	
F-statistic	469.6944			
Prob(F-statistic)	0.0000			

Findings shown in above table reveals that No of female directors and presence of foreign directors FRGN affect the decision of leverage in Asia but do not in Europe. Results for board size are significant for both groups with positive coefficient but



dual position of CEO as DIR and Independent directors are significant for both groups with opposite sign which means if no of outside directors increases in Asian firms. It will increase the creditability and due to high monitoring and better controlling firms performance increases which leads towards increased Leverage while in European countries as the no of outside directors increases due to rigorous supervision of managers firm performance and retained earnings increases at one side. On the other hand under controlled environment managers will avoid to take risky decisions so they will follow pecking order theory and will prefer reinvestment in place of issuing debt which can lead to bankruptcy.

Dual position of CEO shows in- significant result for Asia where there is mostly family owned business. Krause et al. (2014) verified that CEO with dual position have potency to decide the maximization of own benefits at the expense of investors, it will limit the autonomy of board as CEO with dual control be able to influence the other members opinion with its higher position. These outcomes are also consistent with the findings of (Butt and Hasan, 2009). In Europe dual position of CEO depicts positive and significant results consistent with Uwuigbe (2014); Bajagai et al. (2019) who found positive relation between CEO duality with leverage. They gave steward ship theory in favor of their investigation that with more centralized authority there persist high flow of communication efficient collaboration will increase the trust of investor on management who take its advantage and choose debt over equity.

### 4.5.3 Impact of Cultural Dimension on Capital Decision

Outcomes indicates that Masculinity (MAS) show significant but opposite sign for Asia and Europe as its coefficient is negative for Asia. As shown in descriptive statistics the mean value of MAS for Asia is 51.4 while in group of Europe mean value is 38.20 showing higher masculine culture of Asia. These signs are consistent with the findings of Chui et al. (2002); Lin and Fu (2017) who found negative relation, explaining that in masculine culture to keep their dominance manager choose safer project with lower chances of default.

So, their 1st choice to raise capital will be equity. For Uncertainty Avoidance

(UNC AVOI) both groups have negative coefficient with significant impact. Mean

TABLE 4.30: Impact of Cultural Dimensions on Capital Structure (Asia and Europe)

Variables	Coefficient	Std.Error	t.statistics	P value
C	0.0580	0.0301	1.9239	0.0545
LVG ASIA(-1)	0.8469	0.0351	24.1294	0.0000
LVG EUR(-1)	0.8669	0.0210	41.3380	0.0000
CUR RATIO ASIA	0.0012	0.0023	0.5070	0.6122
CUR RATIO EUR	0.0049	0.0033	1.5199	0.1287
PROFITABILITY ASIA	-0.0440	0.0232	-1.8986	0.0577
PROFITABILITY EUR	-0.1040	0.0328	-3.1682	0.0016
TANGIBILITY ASIA	0.0338	0.0162	2.0861	0.0371
TANGIBILITY EUR	0.0224	0.0114	1.9660	0.0494
LS ASIA	0.0038	0.0034	1.1172	0.2640
LS EUR	0.0027	0.0038	0.7201	0.4715
GROWTH ASIA	-0.0001	0.002	-0.0322	0.9743
GROWTH EUR	-0.0008	0.0013	-0.6122	0.5404
BSZ ASIA	0.0023	0.0008	2.6535	0.0080
BSZ EUR	0.0182	0.0064	2.8426	0.0045
DIR_CEO ASIA	-0.0036	0.0036	-1.0077	0.3137
DIR_CEO EUR	0.0005	0.0030	0.1660	0.8682
FEMALE ASIA	-0.0005	0.0025	-0.1952	0.8452
FEMALE EUR	-0.0003	0.0019	-0.1360	0.8918
INDP DIR ASIA	-0.0002	0.0002	-0.9596	0.3373
INDP DIR EUR	-0.0008	0.0004	-1.7213	0.0853
FRGN DIR ASIA	-0.0039	0.0043	-0.9104	0.3627
FRGN DIR EUR	-0.0021	0.0042	-0.5026	0.6153
MAS ASIA	-0.0015	0.0006	-2.3627	0.0182
MAS EUR	0.0014	0.0007	1.9444	0.0624
UNC AVOI ASIA	-0.0003	0.0002	-1.6139	0.1067
UNC AVOI EUR	-0.0011	0.0006	-1.9558	0.0506
IND ASIA	0.0030	0.0010	3.1348	0.0017
IND EUR	-0.0055	0.0039	-1.4076	0.1593
		Weighted Statistics	Unweighted Statistics	
R-squared	0.7994		0.7499	
Mean dependent var	0.1784		0.1638	
Durbin-Watson stat	2.2109		2.3529	
F-statistic	391.7907	Prob(F-statistic)	0.0000	

values of UNC AVOI in Asia and Europe is 63 and 68.7 respectively showing higher UNC AVOI culture of these sampled groups. Countries with higher values on (UNC AVOI), i.e., Italy, Turkey, Pakistan and Spain have values above than

70 which specify that here people are working on set rules and strategies, they evade impulsive circumstances and rigorously stick to their plans, where they feel any uncertain situation, they try to elude it (Chang et al., 2012). These people have extra inclination for saving to cope with the unpredicted conditions in future, (Shoham and Malul, 2012). So, they follow pecking order theory and use internal funds to meet their need of capital.

Individualism (IND) shows significant effects on the financial decision of Asia where the mean value of the variable is 30. With lower Mean value Asian countries shows positive relation with leverage. insignificant for Europe. Even in presence of higher mean value of IND in EUROPE (64), outcomes show insignificant effect of PD in Europe. In presence of rigorous monitoring and management IND affect can be controlled and managers are compelled to take decision which are better for firm and community while in Asian countries most of the firms are family controlled with less or no power of shareholders, so managers use autocratic behavior in acquiring debt.

#### **4.5.4 Impact of Hofstede's Dimensions on Capital Structure**

Due to the issue of singular matrices all six dimensions cannot be regressed in a single regression. To examine the effect of rest of the three dimensions i.e., INDIVIDUALISIM, LONG TERM ORIENTATION and INDULGANCE another regression has been regressed with the following equation.

Along with the above mentioned 3 dimensions of Hofstede, Power Distance (PD), Long Term Orientation (LTO) and Indulgence (INDLG) also shows the significant results.

##### **Summry of Cultural Dimensions on Capital Structure (Asia vs Europe)**

Outcomes of above mentioned variables in both groups are significant with same signs for both groups, PD relation with leverage is negative, LTO and INDLG have direct relation with leverage. Mean values of PD are above or near to mid value of 50 such as Asia has approximately 72 mean value and for Europe this value is 43. Aggarwal and Goodell (2009); Zheng et al. (2012); Wang and Esqueda

TABLE 4.31: Impact of Hofstede's Dimensions on Capital Structure

Variables	Coefficient	Std.Error	t.stat	P value
C	-0.1902	0.0751	-2.5340	0.0113
LVG ASIA(-1)	0.8396	0.0361	23.2681	0.0000
LVG EUR(-1)	0.8674	0.0208	41.6890	0.0000
CUR RATIO ASIA	0.0012	0.0023	0.5390	0.5899
CUR RATIO EUR	0.0063	0.0032	1.9543	0.0508
PROFITABILITY ASIA	-0.0368	0.0225	-1.6364	0.1019
PROFITABILITY EUR	-0.1140	0.0327	-3.4819	0.0005
TANGIBILITY ASIA	0.0402	0.0169	2.3811	0.0173
TANGIBILITY EUR	0.0216	0.0114	1.8990	0.0577
LS ASIA	0.0049	0.0035	1.3967	0.1626
LS EUR	0.0051	0.0038	1.3479	0.1778
GROWTH ASIA	-0.0039	0.0043	-0.9104	0.3627
GROWTH EUR	0.0007	0.0013	0.5323	0.5945
BSZ ASIA	0.0012	0.0002	5.0035	0.0000
BSZ EUR	0.0017	0.0005	2.8758	0.0041
DIR_CEO ASIA	-0.0030	0.0037	-0.8050	0.4209
DIR_CEO EUR	0.0006	0.0030	0.1847	0.8535
FEMALE ASIA	-0.0012	0.0025	-0.4627	0.6436
FEMALE EUR	0.0000	0.0019	0.0223	0.9822
INDP DIR ASIA	-0.0006	0.0006	-1.0430	0.2970
INDP DIR EUR	-0.0011	0.0010	-1.0684	0.2854
FRGN DIR ASIA	-0.0022	0.0046	-0.4852	0.6276
FRGN DIR EUR	-0.0017	0.0042	-0.4199	0.6746
PD ASIA	-0.0005	0.0003	-1.9062	0.0568
PD EUR	-0.0051	0.0021	-2.4135	0.0159
LTO ASIA	0.0035	0.0016	2.2349	0.0255
LTO EUR	0.0021	0.0009	2.2325	0.0257
INDLG ASIA	0.0010	0.0003	3.7069	0.0002
INDLGEUR	0.0017	0.0008	2.1930	0.0284
	Weighted Statistics		Unweighted Statistics	
R-squared	0.8012		0.7516	
Mean dependent var	0.1786		0.1638	
Durbin-Watson stat	2.2137		2.3532	
F-statistic	365.2619	Prob(F-statistic)		0.0000

(2014); Boubakri and Saffar (2016); Willemink (2018) also found negative relation supporting to their findings they argue that subordinates in the countries having PD culture accepts monocratic leadership style, accept no sharing of information from higher authorities. Trade off theory, agency and bankruptcy theory also endorses the fact that lower information elevate transaction cost taking to greater chances of bankruptcy, discouraging the firms to add more debt in their capital

TABLE 4.32: Summary of Cultural Dimensions on Capital Structure (Asia vs Europe)

C.D	Mean (Asia)	Mean (Europe)	Rel. (Asia)	Rel. (Europe)
MAS	52	38	- ve sig	+ve sig
Unc_Avoi	63	69	-ve sig	-ve sig
IND	30	64	+ve sig	-ve insig
PD	72	43	-ve sig	-ve sig
LTO	48	45	+ve sig	+ve sig
INDLG	24	46	+ve sig	+ve sig

Whereas, C.D refers to Cultural Dimension, Rel. referes Relation

structure.

LTO mean value of both groups for sampled countries are lower than midpoint 50 describing culture of short term orientation in these countries i.e., Asia 48, Europe 45. These outcomes are aligned with the findings of [Lian et al. \(2017\)](#); [Willemink \(2018\)](#) who argued that in culture of short term orientation, individuals focus on speedy results, Have fashion of extra spending, relish leisure time. For this purpose, even if they don't have funds, they acquire loans to satisfy their wants. Indulgence vs Restraint is the last dimension of Hofstede which have direct relation with long term debt in this study of Asia and Europe. Mean values for both groups are less than 50, i.e., Asia 24 approximately and 46 for Europe which indicates restraint culture. As this is relatively new dimension showing 0 value for some sample countries such as Pakistan affecting the overall average value of Asia. Individuals living in culture with lower values of Indulgence (restrain) are not satisfied with their lives, they so to fulfil their wants they are ready to take risk even at higher cost. These findings of Asia and Europe are not aligned with the previous scholars such as [Wang and Esqueda \(2014\)](#); [Willemink \(2018\)](#); [Zhang \(2020\)](#) who found negative relation with lower values of indulgence (restrain) and debt. These results are summarized in the following Table 4.32.

# Chapter 5

## Conclusion and Policy Recommendations

In this chapter, first summaries of research findings, and its conclusion based on these findings are presented in section 5.1. Consequences and implications of the study are discussed in the section 5.2. Constraints & future directions are reported in section 5.3.

### 5.1 Summary and Conclusions

The present research contributes to the current corporate finance literature in three ways. Firstly, it explores the impact of firm specific variables on capital structure of firm by incorporating comprehensive measures of the firm specific factors. Secondly, it investigates the role of corporate governance on decision of capital in existence of numerous measures of governance affecting board decisions. Finally, it analyzes the extent to which culture of the country effects the financial decision of the firm. For this purpose, Hofstede cultural dimensions are regressed in presence of firm specific and governance related variables. Financial data of 673 listed non-financial firms for 6393 transactions from 14 countries of the world over time period of 11 years from 2006 to 2016, has been used for research purpose.

The aim of the study is to explore the missing point in corporate finance which may be the possible reason of opposite results in firm and governance variables

and capital decision. This study makes hypotheses that culture from which the firm and manager belongs effects on their power of financial decision. Values of Six cultural dimensions of Hofstede, MAS, Unc\_avoi, IND, PD, LTO and INDLG have been used to explore this culture effect. To achieve this objective, all variables of current study are regressed through EGLS method in EViews, as the panel data is used in this study which can create problem of autocorrelation and heteroscedasticity, these problems can be addressed in EGLS. All six cultural dimensions confirms our hypotheses depicting significant results that culture have affect in financial decisions.

At 1st stage, relationship between firm specific variables, (lag of leverage, current ratio, tangibility, profitability, size of business and growth in MV to BV of equity) and Governance variables (board size, dir\_ceo, no of female directors) for whole sample of data of 14 countries are observed with cultural measures (MAS, Unc\_avoi, PD, IND, LTO, INDLG). MAS, Unc\_avoi, IND and LTO has significant positive effect on inclusion of leverage in capital while PD and INDLG has significant negative effect with long term debt.

At 2nd stage more proxies of governance such as dual position of CEO as chairman, presence or absence of female in the board, no of foreign directors and no of independent directors in the management along with board size, dual position of director as CEO and no of female directors, effect of culture has been analyzed, even in the presence of all these measuring factors MAS, UNC\_AVOI, IND, LTO and INDLG shows significant effect on leverage. PD has insignificant results in this sample. MAS, UNC\_AVOI and IND have positive beta while LTO and INDLG shows negative coefficient. PD has insignificant results in this sample.

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 a emerging economy 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. Due to issue of collinearity in developed and emerging economies INDLG can not be regressed at same time with other 5 cultural variables.

Finally effect of culture in Asian and European countries have been analyzed. MAS have significantly negative, and IND shows significantly positive relation with leverage while Unc\_avoi is insignificant for Asia. For Europe, all three variables, MAS, Unc\_avoi and IND has significant outcomes, positive for MAS and negative for Unc\_avoi and IND shows negative beta in Europe.

Common findings have been observed that PD always shows negative relation with long term debt while value of MAS above 50 shows negative and below 50 shows positive relation with leverage.

## 5.2 Policy Implications

This research has academic as well as practical affects regarding impact of culture on capital structure of the firm in presence of firm and governance variables. The results of the analysis suggest policy to corporate executives that irrespective of usual determining factor of firm-level and governance level decisions, they should also consider the national cultural. In a particular cultural setting, corporate managers can enhance the financial performance of companies by adopting the certain financing patterns.

1. As board size is significant in all regressions so some consideration should be given to the country or region from where corporate managers belongs. Corporate managers explicitly fund managers executing their functions in specific culture can consider the outcomes of this research at the time of financing decision, it can improve their financial performance.
2. Dimensions of national culture including PDI, Unc\_avoi, MAS, IND, LTO and INDLG have shown their influence on the decision of long-term debt in all countries included in this study. These dimensions effect differently in



different regions but in all results PD and INDLG show negative relation with leverage.

3. In Asian countries and those which are in emerging economy Masculinity value is high and managers do not want to include risk in their portfolio because failure can hurt their ego, so they show negative relation with long term debt.
4. Companies in developed regions are at higher risk as MAS, Unc\_avoi and IND have positive relation with debt while in emerging countries managers are risk averse as MAS, Unc\_avoi, IND and PD shows negative relation with debt.
5. Investors can analyze the culture of country where they are investing and their appointing bodies origins which can protect them from investing in those firms whose management shows higher tendency toward risky funding.

### **5.3 Limitations of the Study**

This study investigates the effect of culture in financial decision across 15 countries, data limitation regarding governance variable has been observed due to which independent and foreign directors for all countries were not included in the study, so effect of these variables cannot be explored in some countries and results can not be generalized for these regions. Value of INDLG is not available for all countries due to which in some subsamples it created problem and its affect in Asia vs Europe and emerging vs developed can be observed.

### **5.4 Future Directions**

As traditional finance investigates the financial outcomes and make conclusions on the bases of these monetary values, current study contributes to the field of finance by redefining the traditional capital structure theories considering national culture. This study explores that how governance variables become important taking into consideration the culture of the related executives in boardroom. For

this study data of 15 countries from the continent of Asia, Europe, Middle East and North America has been collected and results are supporting the hypotheses that cultural dimensions effect the capital decision. It shows country level effect, region and economy level effect. Upcoming researchers may explore other financial outcomes related to cultural influence on capital structure across the other regions by using the same methodology applied in this research. They can include more regions to get in-depth knowledge of culture on capital structure.

Due to limitation of data availability foreign director's country effect at firm level is not explored in the current study rather a dummy variable is used. In future, researchers can explore the decisions of directors belonging from a specific culture. This will help the international investor at stage of making investment in larger corporations. In future interaction term of governance variables and cultural dimension can be used to explore in depth the relation of the culture and governance. Also it can be discovered that how foreign ownership moderate the relationship between culture and capital structure.

Scholars can also observe the culture effect on other managerial decisions such as investment trend in non-current assets, distribution of profit as dividend or retained earnings ,liquidity, decisions of cash flow. Country wise study may support the firm managers working in the specific countries to examine financial decisions more critically. Data on dimensions of national culture used by [Hofstede \(1984, 2001\)](#) is offered for limited number of countries. More dimensions of national culture including more countries may also be used to expand the scope of the study.

# Bibliography

- Abobakr, M. G. and Elgiziry, K. (2016). The effect of board characteristics and ownership structure on the corporate financial leverage. *Accounting and Finance research*, 5(1):1–14.
- 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. and 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*, 7(3):288–300.
- Adams, R. and Ferreira, D. (2008). One share-one vote: The empirical evidence. *Review of Finance*, 12(1):51–91.
- Adams, R. and Mehran, H. (2002). Board structure and banking firm performance. *Unpublished paper, Federal Reserve Bank of New York*.
- Adams, R. B., Almeida, H., and Ferreira, D. (2005). Powerful CEOs and their impact on corporate performance. *The Review of Financial Studies*, 18(4):1403–1432.
- Adams, R. B. and Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of financial economics*, 94(2):291–309.
- Adams, R. B. and Funk, P. (2012). Beyond the glass ceiling: Does gender matter? *Management science*, 58(2):219–235.
- Adusei, M. and Obeng, E. Y. T. (2019). Board gender diversity and the capital structure of microfinance institutions: A global analysis. *The Quarterly Review of Economics and Finance*, 71:258–269.

- Aftab, U., Javid, A. Y., and Akhter, W. (2018). The determinants of cash holdings around different regions of the world. *Business and Economic Review*, 10(2):151–181.
- Aggarwal, R. and Goodell, J. W. (2009). Markets and institutions in financial intermediation: National characteristics as determinants. *Journal of Banking & Finance*, 33(10):1770–1780.
- Agrawal, A. and 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.
- Agyei, A., Owusu, A. R., et al. (2014). The effect of ownership structure and corporate governance on capital structure of ghanaian listed manufacturing companies. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1):109–118.
- Ahern, K. R. and Dittmar, A. K. (2012). The changing of the boards: The impact on firm valuation of mandated female board representation. *The quarterly journal of economics*, 127(1):137–197.
- Ahmad, H., Akhter, N., Siddiq, T., and Iqbal, Z. (2018). Ownership structure, corporate governance and capital structure of non-financial firms of pakistan. *Information Management and Business Review*, 10(1):31–46.
- Ahmed, I. E. S. (2021). The determinants of capital structure of the gcc oil and gas companies. *670216917*.
- Ahunov, M. and Van Hove, L. (2020). National culture and financial literacy: international evidence. *Applied Economics*, 52(21):2261–2279.
- Ajinkya, B., Bhojraj, S., and Sengupta, P. (2005). The association between outside directors, institutional investors and the properties of management earnings forecasts. *Journal of accounting research*, 43(3):343–376.
- Akbari, M. and Rahmani, S. (2013). Does corporate governance and ownership structure influence capital structure: Empirical evidence from iran. *World of Sciences Journal*, 11(4):531–535.

- Akhtar, S. and Oliver, B. (2009). Determinants of capital structure for japanese multinational and domestic corporations. *International review of finance*, 9(1-2):1–26.
- Al-Hunnayan, S. H. (2020). The capital structure decisions of islamic banks in the gcc. *Journal of Islamic Accounting and Business Research*.
- Al-Najjar, B. and Hussainey, K. (2011). Revisiting the capital-structure puzzle: Uk evidence. *The Journal of Risk Finance*.
- Al-Najjar, B. and Kilincarslan, E. (2018). Revisiting firm-specific determinants of dividend policy: evidence from turkey. *Economic issues*, 23(1).
- Alabdullah, T. T. Y., Laadjal, A., Ries, E., and Al-Asadi, Y. A. A. (2018). Board features and capital structure in emerging markets. *Journal of Advanced Management Science*, 6(2).
- Alfawareh, F. S., Al-Kofahi, M., Daoud, L., Marei, A., and Alkhazaleh, A. (2021). The determinants of capital structure: A conceptual understanding of non-financial firms in jordan. *Turkish Online Journal of Qualitative Inquiry*, 12:2144–52.
- Alipour, M., Mohammadi, M. F. S., and Derakhshan, H. (2015). Determinants of capital structure: an empirical study of firms in iran. *International Journal of Law and Management*.
- Allen, D. E. (1991). The determinants of the capital structure of listed australian companies: the financial manager’s perspective. *Australian Journal of Management*, 16(2):103–128.
- Allen, M. T. (1995). Capital structure determinants in real estate limited partnerships. *Financial Review*, 30(3):399–426.
- Alves, P., Couto, E. B., and Francisco, P. M. (2015). Board of directors? composition and capital structure. *Research in International Business and Finance*, 35:1–32.

- Alves, S. (2020). Ceo duality and firm performance: Portuguese evidence. In *Conceptual and Theoretical Approaches to Corporate Social Responsibility, Entrepreneurial Orientation, and Financial Performance*, pages 227–246. IGI Global.
- Amidu, M. (2007). Determinants of capital structure of banks in ghana: an empirical approach. *Baltic journal of management*, 2(1):67–79.
- Amin, A., Ali, R., Rehman, R. U., Naseem, M. A., and Ahmad, M. I. (2022). Female presence in corporate governance, firm performance, and the moderating role of family ownership. *Economic Research-Ekonomska Istraživanja*, 35(1):929–948.
- Anderson, R. C., Mansi, S. A., and Reeb, D. M. (2004). Board characteristics, accounting report integrity, and the cost of debt. *Journal of accounting and economics*, 37(3):315–342.
- Ang, J. S., Chua, J. H., and McConnell, J. J. (1982). The administrative costs of corporate bankruptcy: A note. *The Journal of Finance*, 37(1):219–226.
- Antonczyk, R. C. and Salzmann, A. J. (2014). Overconfidence and optimism: The effect of national culture on capital structure. *Research in International Business and Finance*, 31:132–151.
- Antoniou, A., Guney, Y., and Paudyal, K. (2002). The determinants of corporate capital structure: Evidence from european countries.
- Arosa, B., Iturralde, T., and Maseda, A. (2013). The board structure and firm performance in smes: Evidence from spain. *Investigaciones Europeas de Dirección y Economía de la Empresa*, 19(3):127–135.
- Arosa, C. M. V., Richie, N., and Schuhmann, P. W. (2014). The impact of culture on market timing in capital structure choices. *Research in International Business and Finance*, 31:178–192.
- Ashraf, B. N., Zheng, C., and Arshad, S. (2016). Effects of national culture on bank risk-taking behavior. *Research in International Business and Finance*, 37:309–326.

- Astakhov, A., Havranek, T., and Novak, J. (2019). Firm size and stock returns: A quantitative survey. *Journal of Economic Surveys*, 33(5):1463–1492.
- Bae, S. C., Chang, K., and Kang, E. (2012). Culture, corporate governance, and dividend policy: international evidence. *Journal of Financial Research*, 35(2):289–316.
- Bajagai, R. K., Keshari, R. K., Bhetwal, P., Sah, R. S., and Jha, R. N. (2019). Impact of ownership structure and corporate governance on capital structure of nepalese listed companies. In *Business Governance and Society*, pages 399–419. Springer.
- Bajtelsmit, V. L. and Bernasek, A. (1996). Why do women invest differently than men? *Financial counseling and planning*, 7.
- Baker, M. and Wurgler, J. (2002). Market timing and capital structure. *The journal of finance*, 57(1):1–32.
- Baltagi, B. H. and Li, Q. (1995). Testing ar (1) against ma (1) disturbances in an error component model. *Journal of Econometrics*, 68(1):133–151.
- Bancel, F. and Mittoo, U. R. (2004). Cross-country determinants of capital structure choice: a survey of european firms. *Financial management*, pages 103–132.
- Barca, F. (1995). On corporate governance in italy: issues, facts and agenda. *Facts and Agenda (September 1995)*.
- Barclay, M. J. and Smith, C. W. (2005). The capital structure puzzle: The evidence revisited. *Journal of applied corporate finance*, 17(1):8–17.
- Baxamusa, M. and Jalal, A. (2014). Does religion affect capital structure? *Research in International Business and Finance*, 31:112–131.
- Baysinger, B. D. and Butler, H. N. (1985). Corporate governance and the board of directors: Performance effects of changes in board composition. *Journal of Law, Economics, & Organization*, 1(1):101–124.
- Baysinger, B. D. and Zardkoohi, A. (1986). Technology, residual claimants, and corporate control. *Journal of Law, Economics, & Organization*, 2(2):339–349.

- Beaver, W. H., Griffin, P. A., and Landsman, W. R. (1982). The incremental information content of replacement cost earnings. *Journal of Accounting and Economics*, 4(1):15–39.
- Becker, G. S. (2009). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago press.
- Beekes, W. and Brown, P. (2006). Do better-governed australian firms make more informative disclosures? *Journal of Business Finance & Accounting*, 33(3-4):422–450.
- Begulova, Z. and Lace, N. (2019). The role of national culture in the relationship between capital structure and investment decisions of european information sector companies. 15(2):10–18.
- Beltramini, R. F., Peterson, R. A., and Kozmetsky, G. (1984). Concerns of college students regarding business ethics. *journal of Business Ethics*, 3(3):195–200.
- Berger, P. G., Ofek, E., and Yermack, D. L. (1997). Managerial entrenchment and capital structure decisions. *The journal of finance*, 52(4):1411–1438.
- Bevan, A. A. and Danbolt, J. (2002). Capital structure and its determinants in the uk-a decompositional analysis. *Applied financial economics*, 12(3):159–170.
- Bhagat, S. and Bolton, B. (2008). Corporate governance and firm performance. *Journal of corporate finance*, 14(3):257–273.
- Bhattacharjee, A. and Dash, M. (2021). Determinants of capital structure in the indian cement sector. *Asian Journal of Economics, Finance and Management*, pages 1–8.
- Blonk, B. (2018). National culture and capital structure.
- Bodaghi, A. and Ahmadpour, A. (2010). The effect of corporate governance and ownership structure on capital.
- Bokpin, G. A. and Arko, A. C. (2009). Ownership structure, corporate governance and capital structure decisions of firms: Empirical evidence from ghana. *Studies in Economics and Finance*, 26(4):246–256.



- Booth, L., Aivazian, V., Demirguc-Kunt, A., and Maksimovic, V. (2001). Capital structures in developing countries. *The Journal of Finance*, 56(1):87–130.
- Boubakri, N. and Saffar, W. (2016). Culture and externally financed firm growth. *Journal of Corporate Finance*, 41:502–520.
- Bradley, M., Jarrell, G. A., and Kim, E. H. (1984). On the existence of an optimal capital structure: Theory and evidence. *The journal of Finance*, 39(3):857–878.
- Breuer, W. and Nadler, C. (2015a). Cultural finance as a research field—an evaluative survey. Technical report, Working Paper. <https://ssrn.com/abstract=2658146>.
- Breuer, W. and Nadler, C. (2015b). Cultural finance as a research field—an evaluative survey. Technical report, Working Paper. <https://ssrn.com/abstract=2658146>.
- Breuer, W. and Quinten, B. (2009). Cultural finance. *Available at SSRN 1282068*.
- Brickley, J. A., Coles, J. L., and Jarrell, G. (1997). Leadership structure: Separating the ceo and chairman of the board. *Journal of corporate Finance*, 3(3):189–220.
- Brown, L. D. and Caylor, M. L. (2009). Corporate governance and firm operating performance. *Review of quantitative finance and accounting*, 32(2):129–144.
- Brusov, P., Filatova, T., Orekhova, N., Eskindarov, M., et al. (2015). *Modern corporate finance, investments and taxation*. Springer.
- Buchetti, B. and Santoni, A. (2022). Corporate governance in the banking sector (cgbs): A literature review. *Corporate Governance in the Banking Sector*, pages 37–91.
- Budiman, J. (2015). Corporate governance, capital structure and shareholder value of indonesian stock exchange firms. *Jurnal Manajemen Maranatha*, 15(1).
- Buferna, F. M., Bangassa, K., and Hodgkinson, L. (2005). *Determinants of capital structure: evidence from Libya*, volume 8. Citeseer.

- Butt, S. A. and Hasan, A. (2009). Impact of ownership structure and corporate governance on capital structure of pakistani listed companies. *International Journal of Business & Management*, 4(2).
- Carter, D. A., Simkins, B. J., and Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial review*, 38(1):33–53.
- Carter, S. and Cannon, T. (1992). *Women as entrepreneurs: A study of female business owners, their motivations, experiences and strategies for success*.
- Cevheroglu-Acar, M. G. (2018). Determinants of capital structure: Empirical evidence from turkey. *J. Mgmt. & Sustainability*, 8:31.
- Chaabouni, I. (2013). Interaction board of directors-capital structure: Integrating skills and networks.
- Chakraborty, I. (2010). Capital structure in an emerging stock market: The case of india. *Research in international business and finance*, 24(3):295–314.
- Chandrasena, S. (2019). The determinants of corporate capital structure: Do ceo’s cultural values affect the firm leverage decision? *Available at SSRN 3371499*.
- Charitou, A., Clubb, C., and Andreou, A. (2001). The effect of earnings permanence, growth, and firm size on the usefulness of cash flows and earnings in explaining security returns: empirical evidence for the uk. *Journal of Business Finance & Accounting*, 28(5-6):563–594.
- Charitou, A. and Louca, C. (2009). Cross-listing and operating performance: Evidence from exchange-listed american depository receipts. *Journal of Business Finance & Accounting*, 36(1-2):99–129.
- Chen, J. and Strange, R. (2005). The determinants of capital structure: Evidence from chinese listed companies. *Economic change and Restructuring*, 38(1):11–35.
- Chen, J. J. (2004). Determinants of capital structure of chinese-listed companies. *Journal of Business research*, 57(12):1341–1351.

- Chen, S.-S. and Chen, I.-J. (2012). Corporate governance and capital allocations of diversified firms. *Journal of Banking & Finance*, 36(2):395–409.
- Cheng, E. C. and Courtenay, S. M. (2006). Board composition, regulatory regime and voluntary disclosure. *The international journal of accounting*, 41(3):262–289.
- Chui, A. C., Kwok, C. C., and Zhou, G. S. (2016). National culture and the cost of debt. *Journal of Banking & Finance*, 69:1–19.
- Chui, A. C., Lloyd, A. E., and 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.
- Chui, A. C., Titman, S., and Wei, K. J. (2010). Individualism and momentum around the world. *The Journal of Finance*, 65(1):361–392.
- Coleman, S. (2003). Women and risk: An analysis of attitudes and investment behavior. *Academy of accounting and financial studies journal*, 7(2):99.
- Cosentino, N., Montalto, F., Donato, C., Via, A., et al. (2012). Gender diversity in the corporate boardroom: Do women affect risk? *Rivista di Politica Economica*, (2):73–95.
- Cwynar, A., Cwynar, W., and Dankiewicz, R. (2015). Studies of firm capital structure determinants in poland: an integrative review. *e-Finanse: Financial Internet Quarterly*, 11(4):1–22.
- Daily, C. M. and Dalton, D. R. (1994a). Bankruptcy and corporate governance: The impact of board composition and structure. *Academy of Management journal*, 37(6):1603–1617.
- Daily, C. M. and Dalton, D. R. (1994b). Corporate governance and the bankrupt firm: An empirical assessment. *Strategic Management Journal*, 15(8):643–654.
- Dalton, C. M. and Dalton, D. R. (2005). Boards of directors: Utilizing empirical evidence in developing practical prescriptions. *British Journal of management*, 16:S91–S97.

- Dalton, D. R., Hitt, M. A., Certo, S. T., and Dalton, C. M. (2007). The fundamental agency problem and its mitigation: independence, equity, and the market for corporate control. *Academy of management annals*, 1(1):1–64.
- Dalton, D. R. and Kesner, I. F. (1987). Composition and ceo duality in boards of directors: An international perspective. *Journal of International Business Studies*, 18(3):33–42.
- Dang, T. L., Dang, V. A., Moshirian, F., Nguyen, L., and Zhang, B. (2019). News media coverage and corporate leverage adjustments. *Journal of Banking & Finance*, 109:105666.
- Davis, J. H., Schoorman, F. D., and Donaldson, L. (1997). Davis, schoorman, and donaldson reply: The distinctiveness of agency theory and stewardship theory. *Academy of Management. the Academy of Management Review*, 22(3):611.
- De Jong, A., Kabir, R., and Nguyen, T. T. (2011). Capital structure around the world: The roles of firm-and country-specific determinants. *Journal of banking & Finance*, 32(9):1954–1969.
- DeAngelo, H. and Masulis, R. W. (1980). Optimal capital structure under corporate and personal taxation. *Journal of financial economics*, 8(1):3–29.
- Deesomsak, R., Paudyal, K., and Pescetto, G. (2004). The determinants of capital structure: evidence from the asia pacific region. *Journal of multinational financial management*, 14(4-5):387–405.
- Delcours, N. (2007). The determinants of capital structure in transitional economies. *International Review of Economics & Finance*, 16(3):400–415.
- Demirgüç-Kunt, A. and Levine, R. (2004). *Financial structure and economic growth: A cross-country comparison of banks, markets, and development*. MIT press.
- Dimitropoulos, P. E. and 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.

- Donaldson, L. and Davis, J. H. (1991). Stewardship theory or agency theory: Ceo governance and shareholder returns. *Australian Journal of management*, 16(1):49–64.
- Dowling, M. (2012). Subcultures in household financial decision-making.
- Dunn, P. (2012). The role of gender and human capital on the appointment of new corporate directors to boardroom committees: Canadian evidence. *International Business Research*, 5(5):16.
- Dyer, J. H. and 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.
- Eriotis, N., Vasiliou, D., and Ventoura-Neokosmidi, Z. (2007). How firm characteristics affect capital structure: an empirical study. *Managerial Finance*, 33(5):321–331.
- Esparza, M. L. P., del Carmen Briano-Turrent, G., and García-Estrada, L. Á. (2018). The board composition as an explanatory factor of the capital structure of mexican listed companies. *Journal of Accounting Research, Organization and Economics*, 1(1):78–84.
- Faccio, M., Marchica, M.-T., and Mura, R. (2016). Ceo gender, corporate risk-taking, and the efficiency of capital allocation. *Journal of corporate finance*, 39:193–209.
- Fama, E. F. and French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *The review of financial studies*, 15(1):1–33.
- Fama, E. F. and Jensen, M. C. (1983). Agency problems and residual claims. *The journal of law and Economics*, 26(2):327–349.
- Fan, J. P., Titman, S., and Twite, G. (2012). An international comparison of capital structure and debt maturity choices. *Journal of Financial and quantitative Analysis*, 47(1):23–56.

- Farooq, U., Ahmed, J., Ashfaq, K., Hassan Khan, G. u., and Khan, S. (2020). National culture and firm financial performance: A mediating role of firm financing decision. *Cogent Business & Management*, 7(1):58–69.
- Fauver, L. and McDonald, M. B. (2015). Culture, agency costs, and governance: International evidence on capital structure. *Pacific-Basin Finance Journal*, 34:1–23.
- Feidakis, A. and Rovolis, A. (2007). Capital structure choice in european union: evidence from the construction industry. *Applied Financial Economics*, 17(12):989–1002.
- Feng, Y., Hassan, A., and Elamer, A. A. (2020). Corporate governance, ownership structure and capital structure: evidence from chinese real estate listed companies. *International Journal of Accounting & Information Management*.
- Ferris, G. R., Harris, J. N., Russell, Z. A., and Maher, L. P. (2018). Politics in organizations. *Sage Reference*, 12:469–486.
- Fidrmuc, J. P. and Jacob, M. (2010). Culture, agency costs, and dividends. *Journal of Comparative Economics*, 38(3):321–339.
- Forte, D., Barros, L. A., and Nakamura, W. T. (2013). Determinants of the capital structure of small and medium sized brazilian enterprises. *BAR-Brazilian Administration Review*, 10:347–369.
- Fosberg, R. H. (2004). Agency problems and debt financing: leadership structure effects. *Corporate Governance: The international journal of business in society*, 4(1):31–38.
- Frank, M. Z. and Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of financial economics*, 67(2):217–248.
- Frank, M. Z. and Goyal, V. K. (2008). Trade-off and pecking order theories of debt. *Handbook of empirical corporate finance*, pages 135–202.
- Frank, M. Z. and Goyal, V. K. (2009). Capital structure decisions: which factors are reliably important? *Financial management*, 38(1):1–37.

- Friend, I. and Lang, L. H. (1988). An empirical test of the impact of managerial self-interest on corporate capital structure. *the Journal of Finance*, 43(2):271–281.
- Gales, L. M. and Kesner, I. F. (1994). An analysis of board of director size and composition in bankrupt organizations. *Journal of business research*, 30(3):271–282.
- Ganiyu, Y. O. and Abiodun, B. Y. (2012). The impact of corporate governance on capital structure decision of nigerian firms. *Research Journal in Organizational Psychology & Educational Studies*, 1(2):121–128.
- Gaud, P., Jani, E., Hoesli, M., and 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). Behavioural finance: Capital budgeting and other investment decisions. *HK Nofsinger, Behavioural Finance. Willey*.
- Giannetti, M. (2003). Do better institutions mitigate agency problems? evidence from corporate finance choices. *Journal of financial and quantitative analysis*, 38(1):185–212.
- Gill, A. and Mathur, N. (2011). Board size, ceo duality, and the value of canadian manufacturing firms. *Journal of Applied Finance and Banking*, 1(3):1.
- Gleason, K. C., Mathur, L. K., and Mathur, I. (2000). The interrelationship between culture, capital structure, and performance: evidence from european retailers. *Journal of business research*, 50(2):185–191.
- Góis, A. D., de Lima, G. A. S. F., de Sousa, N. A., and Malacrida, M. J. C. (2018). The effect of national culture on the relationship between ifrs adoption and the cost of equity capital. *Journal of International Accounting Research*, 17(3):69–85.
- Gordini, N. and Rancati, E. (2017). Gender diversity in the italian boardroom and firm financial performance. *Management Research Review*, 40(1):75–94.

- Graham, J. R., Lemmon, M. L., and Schallheim, J. S. (1998). Debt, leases, taxes, and the endogeneity of corporate tax status. *The journal of finance*, 53(1):131–162.
- Gray, S. J., Kang, T., and Yoo, Y. K. (2013). National culture and international differences in the cost of equity capital. *Management International Review*, 53(6):899–916.
- Grechaniuk, B. and Coupé, T. (2009). Corporate capital structure choices: does managers' gender matter. *Kyiv School of economics*.
- Griffin, D., Li, K., Yue, H., and Zhao, L. (2009). Cultural values and corporate risk-taking. *University of British Columbia and Peking University Working Paper*.
- Guest, P. M. (2009). The impact of board size on firm performance: evidence from the uk. *The European Journal of Finance*, 15(4):385–404.
- Guiso, L., Sapienza, P., and Zingales, L. (2006). Does culture affect economic outcomes? *Journal of Economic perspectives*, 20(2):23–48.
- Gul, F. A., Srinidhi, B., and Ng, A. C. (2011). Does board gender diversity improve the informativeness of stock prices? *Journal of accounting and Economics*, 51(3):314–338.
- Güner, A. (2016). The determinants of capital structure decisions: New evidence from turkish companies. *Procedia economics and finance*, 38:84–89.
- Hahn, P. D. and Lasfer, M. (2016). Impact of foreign directors on board meeting frequency. *International review of financial analysis*, 46:295–308.
- Handoo, A. and Sharma, K. (2014). A study on determinants of capital structure in india. *IIMB Management review*, 26(3):170–182.
- Haq, M., Hu, D., Faff, R., and Pathan, S. (2018). New evidence on national culture and bank capital structure. *Pacific-Basin Finance Journal*, 50:41–64.



- Harford, J., Li, K., and Zhao, X. (2008). Corporate boards and the leverage and debt maturity choices. *International Journal of Corporate Governance*, 1(1):3–27.
- Harris, M. and Raviv, A. (1990). Capital structure and the informational role of debt. *The Journal of Finance*, 45(2):321–349.
- Harris, M. and Raviv, A. (1991). The theory of capital structure. *the Journal of Finance*, 46(1):297–355.
- Heng, T. B., Azrbaijani, S., and San, O. T. (2012). Board of directors and capital structure: Evidence from leading malaysian companies. *Asian Social Science*, 8(3):123–136.
- Hermalin, B. and Weisbach, M. S. (2001). Boards of directors as an endogenously determined institution: A survey of the economic literature.
- Hewa Wellalage, N. and Locke, S. (2012). Corporate governance and capital structure decision of sri lankan listed firms. *Global Review of Business and Economic Research*, 8(1):157–169.
- Hilgen, M. (2014). The impact of cultural clusters on capital structure decisions: Evidence from european retailers. B.S. thesis, University of Twente.
- Hillman, A. J. (2015). Board diversity: Beginning to unpeel the onion. *Corporate Governance: An International Review*, 23(2):104–107.
- Hillman, A. J., Cannella, A. A., and Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management studies*, 37(2):235–256.
- Hillman, A. J. and Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management review*, 28(3):383–396.
- Hirshleifer, D. and 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.
- Hofstede, G. (2011). Dimensionalizing cultures: The hofstede model in context. *Online readings in psychology and culture*, 2(1):2307–0919.
- Hossain, F., Ali, A., et al. (2012). Impact of firm specific factors on capital structure decision: an empirical study of bangladeshi companies. *International Journal of Business Research and Management*, 3(4):163–182.
- Hossain, I. and Hossain, M. A. (2015). Determinants of capital structure and testing of theories: A study on the listed manufacturing companies in bangladesh. *International Journal of Economics and Finance*, 7(4):176–190.
- Hovakimian, A. and 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.
- Hsiao, C. (1985). Benefits and limitations of panel data. *Econometric Reviews*, 4(1):121–174.
- Huang, G. et al. (2006). The determinants of capital structure: Evidence from china. *China economic review*, 17(1):14–36.
- Illiashenko, P. (2019). ?tough guy? vs.?cushion? hypothesis: How does individualism affect risk-taking? *Journal of Behavioral and Experimental Finance*, 24:100212.
- Im, H. J., Kang, Y., and Shon, J. (2020). How does uncertainty influence target capital structure? *Journal of Corporate Finance*, 64:101642.
- Inderst, R. and Vladimirov, V. (2019). Growth firms and relationship finance: A capital structure perspective. *Management Science*, 65(11):5411–5426.

- Irwin, D. and Scott, J. M. (2010). Barriers faced by smes in raising bank finance. *International journal of entrepreneurial behavior & research*, 16(3):245–259.
- Isidro, H. and Sobral, M. (2015). The effects of women on corporate boards on firm value, financial performance, and ethical and social compliance. *Journal of Business Ethics*, 132(1):1–19.
- Jaradat, M. S. (2015). Corporate governance practices and capital structure: A study with special reference to board size, board gender, outside director and ceo duality. *International Journal of Economics, Commerce and Management*, 3(5):264–273.
- Jarallah, S., Saleh, A. S., and Salim, R. (2019). Examining pecking order versus trade-off theories of capital structure: New evidence from j apanese firms. *International Journal of Finance & Economics*, 24(1):204–211.
- Javeed, A., Azeem, M., et al. (2014). Interrelationship among capital structure, corporate governance measures and firm value: Panel study from pakistan. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 8(3):572–589.
- Jaworski, J. and Czerwonka, L. (2021). Determinants of enterprises' capital structure in energy industry: Evidence from european union. *Energies*, 14(7):1871.
- Jayachandran, S. (2015). The roots of gender inequality in developing countries. *economics*, 7(1):63–88.
- 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. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *the Journal of Finance*, 48(3):831–880.
- Jensen, M. C. and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4):305–360.
- John, K. and Senbet, L. W. (1998). Corporate governance and board effectiveness. *Journal of banking & Finance*, 22(4):371–403.

- Jurkus, A. F., Park, J. C., and Woodard, L. S. (2011). Women in top management and agency costs. *Journal of Business Research*, 64(2):180–186.
- Kajola, S. O., Olabisi, J., Fapetu, O., et al. (2019). Corporate governance mechanism and capital structure decision in nigeria. *Izvestiya*, 1:50–68.
- Kanagaretnam, K., Lobo, G. J., and Whalen, D. J. (2007). Does good corporate governance reduce information asymmetry around quarterly earnings announcements? *Journal of Accounting and Public Policy*, 26(4):497–522.
- Kao, M.-F., Hodgkinson, L., and Jaafar, A. (2019). Ownership structure, board of directors and firm performance: evidence from taiwan. *Corporate Governance: The international journal of business in society*.
- Kapopoulos, P. and Lazaretou, S. (2007). Corporate ownership structure and firm performance: evidence from greek firms. *Corporate Governance: An International Review*, 15(2):144–158.
- Karacaer, S., Temiz, H., and Güleç, Ö. F. (2019). Determinants of capital structure: An application on manufacturing firms in borsa istanbul. *International Academic Journal of Accounting and Financial Management*, 3(2):47–59.
- Karadeniz, E., Kandir, S. Y., Balcilar, M., and Onal, Y. B. (2009). Determinants of capital structure: evidence from turkish lodging companies. *International Journal of Contemporary Hospitality Management*, 21(5):594–609.
- Kaszniak, R. and McNichols, M. F. (2002). Does meeting earnings expectations matter? evidence from analyst forecast revisions and share prices. *Journal of Accounting research*, 40(3):727–759.
- Kayo, E. K. and Kimura, H. (2011). Hierarchical determinants of capital structure. *Journal of banking & finance*, 35(2):358–371.
- Ke, J. and Xiong, Y. (2016). An empirical study on profitability and capital structure of the agriculture listed companies. *International Journal of Database Theory and Application*, 9(4):89–96.
- Kearney, C., Mac an Bhaird, C., and Lucey, B. M. (2012). Culture and capital structure in small and medium sized firms. *Available at SSRN 2185284*.

- Khaki, A. R. and Akin, A. (2020). Factors affecting the capital structure: New evidence from gcc countries. *Journal of International Studies*, 13(1).
- Khan, A., Sohail, M., and Ali, M. (2016). Role of firm specific factors affecting capital structure decisions: Evidence from cement sector of pakistan. *Journal of Social and Organizational Analysis*, 2(2):112–127.
- Khatri, N. (2009). Consequences of power distance orientation in organisations. *Vision*, 13(1):1–9.
- Kiel, G. C. and Nicholson, G. J. (2003). Board composition and corporate performance: How the australian experience informs contrasting theories of corporate governance. *Corporate governance: an international review*, 11(3):189–205.
- Kim, H. and Berger, P. D. (2008). A comparison of capital structure determinants: The united states and the republic of korea. *Multinational Business Review*, 16(1):79–100.
- Kim, W. S. and Sorensen, E. H. (1986). Evidence on the impact of the agency costs of debt on corporate debt policy. *Journal of Financial and quantitative analysis*, 21(2):131–144.
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of accounting and economics*, 33(3):375–400.
- Knight, F. H. (1921). *Risk, uncertainty and profit*, volume 31. Houghton Mifflin.
- Krause, R., Semadeni, M., and Cannella Jr, A. A. (2014). Ceo duality: A review and research agenda. *Journal of Management*, 40(1):256–286.
- Kumar, N. and Singh, J. (2013). Effect of board size and promoter ownership on firm value: some empirical findings from india. *Corporate Governance: The international journal of business in society*, 13(1):88–98.
- Kuo, H.-C., Wang, L.-H., Liu, H.-W., et al. (2012). Corporate governance and capital structure: Evidence from taiwan smes. *Review of Economics & Finance*, 2:43–58.

- Kwok, C. C. and Tadesse, S. (2006). National culture and financial systems. *Journal of International business studies*, 37(2):227–247.
- Kyereboah-Coleman, A. and Biekpe, N. (2006). The relationship between board size, board composition, ceo duality and firm performance: Experience from ghana. *Corporate Ownership and Control*, 4(2):114–122.
- Kyriazopoulos, G. (2017). Corporate governance and capital structure in the periods of financial distress. evidence from greece. *Investment management and financial innovations*, (14,? 1 (contin.)):254–262.
- Lang, L., Ofek, E., and Stulz, R. (1996). Leverage, investment, and firm growth. *Journal of financial Economics*, 40(1):3–29.
- Lehn, K. M., Patro, S., and Zhao, M. (2009). Determinants of the size and composition of us corporate boards: 1935-2000. *Financial management*, 38(4):747–780.
- Lemmon, M. L., Roberts, M. R., and Zender, J. F. (2008). Back to the beginning: persistence and the cross-section of corporate capital structure. *The journal of finance*, 63(4):1575–1608.
- Leung, K., Bhagat, R. S., Buchan, N. R., Erez, M., and Gibson, C. B. (2005). Culture and international business: Recent advances and their implications for future research. *Journal of international business studies*, 36(4):357–378.
- Li, K., Griffin, D., Yue, H., and Zhao, L. (2013a). How does culture influence corporate risk-taking? *Journal of Corporate Finance*, 23:1–22.
- Li, K., Griffin, D., Yue, H., and Zhao, L. (2013b). How does culture influence corporate risk-taking? *Journal of Corporate Finance*, 23:1–22.
- Li, K., Yue, H., and Zhao, L. (2009). Ownership, institutions, and capital structure: Evidence from china. *Journal of comparative economics*, 37(3):471–490.
- Li, X., Frenkel, S. J., and Sanders, K. (2011). Strategic hrm as process: How hr system and organizational climate strength influence chinese employee attitudes. *The International Journal of Human Resource Management*, 22(9):1825–1842.

- Lian, Z., He, R., Li, H., Lien, J., and Zheng, J. (2017). Political style, individual preference and consumption pattern: A behavioral approach, working paper.
- Lievenbrück, M. and Schmid, T. (2014). Why do firms (not) hedge??novel evidence on cultural influence. *Journal of Corporate Finance*, 25:92–106.
- Lim, T. C. (2012). Determinants of capital structure empirical evidence from financial services listed firms in china. *International journal of economics and finance*, 4(3):191–203.
- Lin, Y. R. and Fu, X. M. (2017). Does institutional ownership influence firm performance? evidence from china. *International Review of Economics & Finance*, 49:17–57.
- Lindholm, N. (1999). National culture and performance management in mnc subsidiaries. *International studies of management & organization*, 29(4):45–66.
- Lipton, M. and Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *The business lawyer*, pages 59–77.
- Long, M. and Malitz, I. (1985). The investment-financing nexus: Some empirical evidence. *Midland Corporate Finance Journal*, 3(3):53–59.
- Lougee, B. A. and Marquardt, C. A. (2004). Earnings informativeness and strategic disclosure: An empirical examination of ?pro forma? earnings. *The Accounting Review*, 79(3):769–795.
- Mac an Bhaird, C. and Lucey, B. (2014). Culture’s influences: An investigation of inter-country differences in capital structure. *Borsa Istanbul Review*, 14(1):1–9.
- Mackintosh, s. (2013).
- Mak, Y. T. and Kusnadi, Y. (2005). Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin finance journal*, 13(3):301–318.
- Malik, M., Wan, D., Ahmad, M. I., Naseem, M. A., and Rehman, R. U. (2014). Role of board size in corporate governance and firm performance applying pareto

- approach, is it cultural phenomena? *Journal of Applied Business Research (JABR)*, 30(5):1395–1406.
- Malmendier, U., Tate, G., and Yan, J. (2007). Corporate financial policies with overconfident managers.
- Malmendier, U., Tate, G., and Yan, J. (2011). Overconfidence and early-life experiences: the effect of managerial traits on corporate financial policies. *The Journal of finance*, 66(5):1687–1733.
- Manos, R. (2001). *Capital structure and dividend policy: Evidence from emerging markets*. PhD thesis, University of Birmingham.
- Marashdeh, Z. M. S. (2014). *The effect of corporate governance on firm performance in Jordan*. PhD thesis, University of Central Lancashire.
- Markarian, G. and Parbonetti, A. (2007). Firm complexity and board of director composition. *Corporate governance: an international review*, 15(6):1224–1243.
- Marsh, P. (1982). The choice between equity and debt: An empirical study. *The Journal of finance*, 37(1):121–144.
- Masulis, R. W. and Zhang, E. J. (2019). How valuable are independent directors? evidence from external distractions. *Journal of Financial Economics*, 132(3):226–256.
- Matsa, D. A. and Miller, A. R. (2013). A female style in corporate leadership? evidence from quotas. *American Economic Journal: Applied Economics*, 5(3):136–69.
- Maug, E. (1997). Boards of directors and capital structure: alternative forms of corporate restructuring. *Journal of Corporate Finance*, 3(2):113–139.
- Mazur, K. (2007). The determinants of capital structure choice: evidence from polish companies. *International Advances in Economic Research*, 13(4):495–514.
- Mehran, H. (1992). Executive incentive plans, corporate control, and capital structure. *Journal of Financial and Quantitative analysis*, 27(4):539–560.



- Michaelas, N., Chittenden, F., and Poutziouris, P. (1999). Financial policy and capital structure choice in uk smes: Empirical evidence from company panel data. *Small business economics*, 12(2):113–130.
- Miletkov, M., Poulsen, A., and Wintoki, M. B. (2017). Foreign independent directors and the quality of legal institutions. *Journal of International Business Studies*, 48(2):267–292.
- Miller, D. and Friesen, P. H. (1977). Strategy-making in context: ten empirical archetypes. *Journal of management studies*, 14(3):253–280.
- Mirza, H. H., Andleeb, S., and Ramzan, F. (2012). Gender diversity and firm performance: Evidence from pakistan. *Journal of Social and development Sciences*, 3(5):161–166.
- Mishra, R. and Kapil, S. (2017). Effect of ownership structure and board structure on firm value: evidence from india. *Corporate Governance: The International Journal of Business in Society*, 17(4):700–726.
- Mittal, S. and Kumari, L. (2015). Effect of determinants of capital structure on financial leverage: a study of selected indian automobile companies. *Journal of Commerce & Accounting Research*, 4(3):70–75.
- Modigliani, F. and Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American economic review*, 48(3):261–297.
- Mogha, V. and Williams, B. (2021). Culture and capital structure: What else to the puzzle? *International Review of Financial Analysis*, 73:101614.
- Mokarami, M., Ahmadi, M. R., and Hosseinzadeh, A. H. (2012). Corporate governance and financial decision making in the firms listed on tehran stock exchange. *International Research Journal of Finance and Economics*, 93:164–171.
- Monks, R. and Minow, N. (1995). Corporate governance blackwell. *Cambridge, MA*.
- Monks, R. A. (2001). Redesigning corporate governance structures and systems for the twenty first century. *Corporate Governance: An International Review*, 9(3):142–147.

- Moradi, A. and 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.
- Morellec, E. (2001). Asset liquidity, capital structure, and secured debt. *Journal of financial economics*, 61(2):173–206.
- Muravyev, A., Talavera, O., and Schäfer, D. (2009). Entrepreneurs’ gender and financial constraints: Evidence from international data. *Journal of comparative economics*, 37(2):270–286.
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of financial economics*, 5(2):147–175.
- Myers, S. C. and Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2):187–221.
- Nadler, C. and Breuer, W. (2019). Cultural finance as a research field: an evaluative survey. *Journal of Business Economics*, 89(2):191–220.
- Naseem, M. A., Zhang, H., Malik, F., et al. (2017). Capital structure and corporate governance. *The Journal of Developing Areas*, 51(1):33–47.
- Nazir, M. S., Aslam, A., and Nawaz, M. M. (2012). The impact of ceo duality on capital structure: A case from non-financial sector of pakistan. *American Journal of Scientific Research*, 56(56):5–12.
- Newman, K. L. and Nollen, S. D. (1996). Culture and congruence: The fit between management practices and national culture. *Journal of international business studies*, 27(4):753–779.
- Nguyen, T. D. K. and Ramachandran, N. (2006). Capital structure in small and medium-sized enterprises: the case of vietnam. *ASEAN Economic bulletin*, pages 192–211.
- Nha, B. D., Bich Loan, N. T., and Nhung, N. T. T. (2016). Determinants of capital structure choice: Empirical evidence from vietnamese listed companies. *Society and Economy*, 38(1):29–45.

- Niu, X. (2008). Theoretical and practical review of capital structure and its determinants. *International Journal of Business and Management*, 3(3):133–139.
- Njuguna, C. W. and Obwogi, T. N. (2015). Relationship between board characteristics and capital structure among companies listed in east africa. *International Journal of Education and Research*, 3(10):355–372.
- Noor, T., Sinaga, B., and Maulana, T. N. A. (2015). Testing on pecking order theory and analysis of company's characteristic effects on emitted's capital structure. *Indonesian Journal of Business and Entrepreneurship (IJBE)*, 1(2):81–81.
- Oktavina, M., Manalu, S., and 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.
- OKUYAN, H. A. and TAŞÇI, H. M. (2010). Determinants of capital structure: evidence from real sector firms listed in ise. *Ekonomik Yaklaşım*, 21(76):55–72.
- Omoro, N., Aduda, J., and Okiro, K. (2015). Demographic diversity in top management team and financial reporting quality in commercial state corporations in kenya. *Donnish Journal of Accounting and Taxation*, 1(1):1–16.
- 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.
- Öztekin, Ö. (2015). Capital structure decisions around the world: which factors are reliably important? *Journal of financial and quantitative analysis*, 50(3):301–323.
- Pagano, M. and Volpin, P. F. (2005). The political economy of corporate governance. *American economic review*, 95(4):1005–1030.
- Palacín-Sánchez, M. J., Ramírez-Herrera, L. M., and Di Pietro, F. (2013). Capital structure of smes in spanish regions. *Small Business Economics*, 41(2):503–519.
- Pamba, F. (2013). *The effect of ownership structure and corporate governance on capital structure decisions of firms listed on the Nairobi securities exchange*. PhD thesis, University of Nairobi.

- Panda, A. K. and Nanda, S. (2020). Determinants of capital structure; a sector-level analysis for indian manufacturing firms. *International Journal of Productivity and Performance Management*, 69(5):1033–1060.
- Panosso, O., Lucio, M. A., and Hein, N. (2022). Heterogeneidade ou homogeneidade na estrutura de capitais: Um estudo comparativo das empresas listadas da b3. *Revista Eletrônica de Ciências Contábeis*, 11(2):151–173.
- Pepper, A. and Gore, J. (2015). Behavioral agency theory: New foundations for theorizing about executive compensation. *Journal of management*, 41(4):1045–1068.
- Petra, S. T. (2007). The effects of corporate governance on the informativeness of earnings. *Economics of Governance*, 8(2):129–152.
- Primecz, H., Romani, L., and Sackmann, S. (2011). *Cross-cultural management in practice: Culture and negotiated meanings*. Edward Elgar Publishing.
- Purag, M. B., Abdullah, A. B., and 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. and Zingales, L. (1995). What do we know about capital structure? some evidence from international data. *The journal of Finance*, 50(5):1421–1460.
- Rajangam, N., Sundarasan, S. D. D., and Rajagopalan, U. (2014). Impact of governance on profitability, liquidity and gearing of companies. *Asian Social Science*, 10(10):13.
- Ramdani, D. and Witteloostuijn, A. v. (2010). The impact of board independence and ceo duality on firm performance: A quantile regression analysis for indonesia, malaysia, south korea and thailand. *British Journal of Management*, 21(3):607–627.
- Ramli, N. A., Latan, H., and Solovida, G. T. (2019). Determinants of capital structure and firm financial performance—a pls-sem approach: Evidence

- from malaysia and indonesia. *The Quarterly Review of Economics and Finance*, 71:148–160.
- Ranti, U. O. (2013). The effects of board size and ceo duality on firms' capital structure: A study of selected listed firms in nigeria. *Asian Economic and Financial Review*, 3(8):1033.
- Rashid, M., Hj, D. S. N. K. P., Izadi, S., et al. (2020). National culture and capital structure of the shariah compliant firms: evidence from malaysia, saudi arabia and pakistan. *International Review of Economics & Finance*, 80(2):370–391.
- Reguera-Alvarado, N., De Fuentes, P., and Laffarga, J. (2017). Does board gender diversity influence financial performance? evidence from spain. *Journal of Business Ethics*, 141(2):337–350.
- Ricciardi, V. and Simon, H. K. (2000). What is behavioral finance? *Business, Education & Technology Journal*, 2(2):1–9.
- Rose, C. (2007). Does female board representation influence firm performance? the danish evidence. *Corporate Governance: An International Review*, 15(2):404–413.
- Rozali, M. B., Taib, H., Latiff, R., and Salim, M. (2006). Small firms? demand for finance in malaysia. In *Proceeding of International Conference on Business and Information (BAI) July*, pages 12–14.
- Ruback, R. S., Baker, M., and Wurgler, J. (2007). Behavioral corporate finance. In *Handbook of empirical corporate finance*, pages 145–186. Elsevier.
- Saeed, R., Munir, H. M., Lodhi, R. N., Riaz, A., and Iqbal, A. (2014). Capital structure and its determinants: Empirical evidence from pakistan's pharmaceutical firms. *Journal of Basic and Applied Scientific Research*, 4(2):115–125.
- Salancik, G. R. and Pfeffer, J. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Sedliacikova, M., Moresova, M., Alac, P., and Drabek, J. (2021). How do behavioral aspects affect the financial decisions of managers and the competitiveness of enterprises? *Journal of Competitiveness*, 13(2):99.

- Sekely, W. S. and Collins, J. M. (1988). Cultural influences on international capital structure. *Journal of International Business Studies*, 19(1):87–100.
- Serghiescu, L. and Văidean, V.-L. (2014). Determinant factors of the capital structure of a firm-an empirical analysis. *Procedia Economics and Finance*, 15:1447–1457.
- Shahin, A. E., El Adly, L., Barr, E., Fathy, I., and Taha, A. (2021). National cultures and capital structure: Evidence from the emerging markets. *School of Business at The American University in Cairo*, pages 1–16.
- Shao, L., Kwok, C. C., and Guedhami, O. (2010). National culture and dividend policy. *Journal of International Business Studies*, 41(8):1391–1414.
- Shehata, M. (1991). Self-selection bias and the economic consequences of accounting regulation: An application of two-stage switching regression to sfas no. 2. *Accounting Review*, pages 768–787.
- Sheikh, M. F., Shah, S. Z. A., and Akbar, S. (2018). Firm performance, corporate governance and executive compensation in pakistan. *Applied economics*, 50(18):2012–2027.
- 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).
- Sheikh, N. A. (2019). Corporate governance and capital structure: Evidence from pakistan. In *Research in Corporate and Shari?ah Governance in the Muslim World: Theory and Practice*. Emerald Publishing Limited.
- Sheikh, N. A. and Wang, Z. (2011). Determinants of capital structure: An empirical study of firms in manufacturing industry of pakistan. *Managerial finance*, 37(2):117–133.
- Sheikh, N. A. and Wang, Z. (2012). Effects of corporate governance on capital structure: empirical evidence from pakistan. *Corporate Governance: The international journal of business in society*, 12(5):629–641.

- Shin-Ping, L. and Tsung-Hsien, C. (2009). The determinants of corporate performance: A viewpoint from insider ownership and institutional ownership. *Managerial Auditing Journal*, 24(3):233–247.
- Shleifer, A. and Vishny, R. W. (1992). Liquidation values and debt capacity: A market equilibrium approach. *The journal of finance*, 47(4):1343–1366.
- Shleifer, A. and Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2):737–783.
- Shoham, A. and Malul, M. (2012). The role of cultural attributes in savings rates. *Cross Cultural Management: An International Journal*, 19(3):304–314.
- Shyam-Sunder, L. and Myers, S. C. (1999). Testing static tradeoff against pecking order models of capital structure. *Journal of financial economics*, 51(2):219–244.
- Sibilkov, V. (2009). Asset liquidity and capital structure. *Journal of financial and quantitative analysis*, 44(5):1173–1196.
- Singh, V., Terjesen, S., and Vinnicombe, S. (2008). Newly appointed directors in the boardroom:: How do women and men differ? *European management journal*, 26(1):48–58.
- Smith, N., Smith, V., and Verner, M. (2006). Do women in top management affect firm performance? a panel study of 2,500 danish firms. *International Journal of productivity and Performance management*, 55(7):569–593.
- Steinmetz, G. (1999). *State/culture: State-formation after the cultural turn*. Cornell University Press.
- Terjesen, S., Couto, E. B., and Francisco, P. M. (2016). Does the presence of independent and female directors impact firm performance? a multi-country study of board diversity. *Journal of Management & Governance*, 20(3):447–483.
- Thiruvadi, S. (2012). Gender differences and audit committee diligence. *Gender in Management: An International Journal*, 27(6):366–379.

- Titman, S. (1984). The effect of capital structure on a firm's liquidation decision. *Journal of financial economics*, 13(1):137–151.
- Titman, S. and Wessels, R. (1988). The determinants of capital structure choice. *The Journal of finance*, 43(1):1–19.
- Trommsdorff, G. (2016). The influence of socioeconomic change and culture on intergenerational relations 1. In *Youth in Education*, pages 11–26. Routledge.
- Tulung, J. E. and Ramdani, D. (2018). Independence, size and performance of the board: An emerging market research. *Corporate Ownership & Control*, 15(2).
- Uadiale, O. M. (2010). The impact of board structure on corporate financial performance in nigeria.
- Ullah, H., Wang, Z., Mohsin, M., Jiang, W., and Abbas, H. (2022). Multidimensional perspective of green financial innovation between green intellectual capital on sustainable business: the case of pakistan. *Environmental Science and Pollution Research*, 29(4):5552–5568.
- Uwuigbe, U. (2014). Corporate governance and capital structure: evidence from listed firms in nigeria stock exchange. *The Journal of Accounting and Management*, 4(1).
- Uzun, H., Szewczyk, S. H., and Varma, R. (2004). Board composition and corporate fraud. *Financial Analysts Journal*, 60(3):33–43.
- Vafeas, N. (2000). Board structure and the informativeness of earnings. *Journal of Accounting and Public policy*, 19(2):139–160.
- Vakilifard, H. R., Gerayli, M. S., Yanesari, A. M., and Ma'atoofi, A. R. (2011). Effect of corporate governance on capital structure: Case of the iranian listed firms. *European Journal of Economics, Finance and Administrative Sciences*, 35:165–172.
- Van der Laan Smith, J., Adhikari, A., and Tondkar, R. H. (2005). Exploring differences in social disclosures internationally: A stakeholder perspective. *Journal of accounting and public policy*, 24(2):123–151.



- Van der Wijst, N. and Thurik, R. (1993). Determinants of small firm debt ratios: An analysis of retail panel data. *Small Business Economics*, 5(1):55–65.
- Vanacker, T. R. and Manigart, S. (2010). Pecking order and debt capacity considerations for high-growth companies seeking financing. *Small Business Economics*, 35(1):53–69.
- Vijayakumaran, S. and Vijayakumaran, R. (2019). Corporate governance and capital structure decisions: Evidence from chinese listed companies. *Vijayakumaran, R., & Vijayakumaran, S.(2019). Corporate governance and capital structure decisions: Evidence from Chinese listed companies. Journal of Asian Finance, Economics and Business*, 6(3):67–79.
- Vintila, G. and Duca, F. (2013). Study on ceo duality and corporate governance of companies listed in bucharest stock exchange. *Romanian Statistical Review Supplement*, 61(2):88–93.
- Vitolla, F., Raimo, N., Rubino, M., and Garzoni, A. (2019). The impact of national culture on integrated reporting quality. a stakeholder theory approach. *Business strategy and the environment*, 28(8):1558–1571.
- Vivian, A. and Xu, B. (2018). Time-varying managerial overconfidence and pecking order preference. *Review of Quantitative Finance and Accounting*, 50(3):799–835.
- Wald, J. K. (1999). How firm characteristics affect capital structure: an international comparison. *Journal of Financial research*, 22(2):161–187.
- Wang, D. and Esqueda, O. A. (2014). National cultural effects on leverage decisions: Evidence from emerging-market adrs. *Research in International Business and Finance*, 31:152–177.
- Wang, Y.-C., Tsai, J.-J., and Lin, H.-W. W. (2013). The influence of board structure on firm performance. *Journal of Global Business Management*, 9(2):7.
- Wang, Z.-J. and Deng, X.-L. (2006). Corporate governance and financial distress: Evidence from chinese listed companies. *Chinese Economy*, 39(5):5–27.

- Weisbach, M. S. (1988). Outside directors and ceo turnover. *Journal of financial Economics*, 20:431–460.
- Wen, Y., Rwegasira, K., and Bilderbeek, J. (2002). Corporate governance and capital structure decisions of the chinese listed firms. *Corporate Governance: An International Review*, 10(2):75–83.
- Willeminck, T. (2018). Cultural dimensions influencing the capital structure: A study on the g7. B.S. thesis, University of Twente.
- Williamson, O. E. (1988). Corporate finance and corporate governance. *The journal of finance*, 43(3):567–591.
- Wiwattanakantang, Y. (1999). An empirical study on the determinants of the capital structure of thai firms. *Pacific-Basin Finance Journal*, 7(3-4):371–403.
- Wooldridge, J. M. (2002). Econometric analysis of cross section and panel data mit press. *Cambridge, MA*, 108.
- Xuan-Quang, D. and Zhong-Xin, W. (2013). Impact of ownership structure and corporate governance on capital structure: The case of vietnamese firms. *Australian journal of Business and Management research*, 3(3):11–19.
- Yang, Y., Albaity, M., and Hassan, C. H. B. (2015). Dynamic capital structure in china: determinants and adjustment speed. *Investment management and financial innovations*, (12, Iss. 2 (contin.)):195–204.
- Yates, J. F. and de Oliveira, S. (2016). Culture and decision making. *Organizational Behavior and Human Decision Processes*, 136:106–118.
- Young, S. (2000). The increasing use of non-executive directors: its impact on uk board structure and governance arrangements. *Journal of Business Finance & Accounting*, 27(9-10):1311–1342.
- Yusuf, M. R. and Sulung, L. A. K. (2019). Experience, board size, and firm capital structure. In *3rd Asia-Pacific Research in Social Sciences and Humanities Universitas Indonesia Conference (APRISH 2018)*, pages 232–238. Atlantis Press.

- Zaid, M. A., Wang, M., Abuhijleh, S. T., Issa, A., Saleh, M. W., and Ali, F. (2020). Corporate governance practices and capital structure decisions: the moderating effect of gender diversity. *Corporate Governance: The International Journal of Business in Society*, 20(5):939–964.
- Zeidan, R., Galil, K., and Shapir, O. M. (2018). Do ultimate owners follow the pecking order theory? *The Quarterly Review of Economics and Finance*, 67:45–50.
- Zhang, M. (2020). *The effect of national culture on corporate policies: evidence from the US corporations*. PhD thesis, Concordia University.
- Zheng, C. and Ashraf, B. N. (2014). National culture and dividend policy: International evidence from banking. *Journal of Behavioral and Experimental Finance*, 3:22–40.
- Zheng, X., El Ghouli, S., Guedhami, O., and Kwok, C. C. (2012). National culture and corporate debt maturity. *Journal of Banking & Finance*, 36(2):468–488.
- Zingales, L. (2011). The” cultural revolution” in finance. *Journal of Financial Economics*, 117(1):1–4.
- Zingales, L. (2015). Presidential address: Does finance benefit society? *The Journal of Finance*, 70(4):1327–1363.
- Zollo, M. and Ringov, D. (2007). The effect of national culture on corporate social responsibility. *Corporate Governance*, 7(4):476–485.