

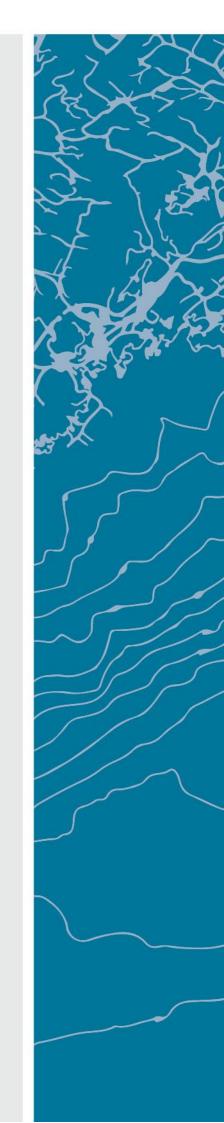
# INVESTIGATION OF ENVIRONMENTAL DETERMINANTS EFFECTING BUSINESS CULTURAL INTELLIGENCE

**ASHOK ACHARYA** 

## **SUPERVISOR**

Prof. Ilan Alon Erik Lankut

University of Agder, 2019 School of Business and law



#### **Abstract**

The background of the study was based on the significance of country specific determinants of business or institutional progress based on business cultural intelligence quotient (BCIQ) measures. The study explored culture and institutions as two schools of thoughts essential to institute determinants influencing BCIQ. Cultural institutions were defined as charitable and public corporations with different structures that are determined by host countries. Culture and institutions were identified as the main country-specific or environmental determinants influencing BCIQ. This paper is one of the active and captivating lines of study anchored or underpinned by the need to understand most pertinent characteristics of institutions (for development and growth) and illustrate the connection between culture and institutional features.

The researcher used six elements or measures for BCIQ to test relationship between culture and institutional success. The measures are Global Knowledge (KNOW), Adaptive Communicative behavior (COMM), Active Listening and Perceptual Sensitivity (SENS), Cognitive Preparation and Learning Behavior (PREP), Cognitive Awareness (AWAR), and Motivation (MOTI). BCIQ is an online instrument that allows the researcher to have real-time feedback and Cross-Cultural & Strategic Management Journal (CCSMJ) has tested and approved its reliability and validity. The analytical tools used for this study is SPSS application that has the functional capability. Mixed model regression analysis and correlations were essential for evaluating the trends of data and statistics.

Findings showed that country variables and demographics variables have direct influence on BCIQ and institutional growth. The results approved the alternative hypothesis by confirming what earlier studies had discovered regarding the relationship between globalize countries, democracy, and higher GDP and BCIQ scores. The corroboration of the literature review findings and BCIQ findings demonstrated the validity and reliability of the current study

The study was relevant to the managers or multinational employee or students since they acquire insights into the significance and use of BCIQ measures in a business environment. Therefore, it is recommended that training programs should be developed

to help learners and practitioners acquire more knowledge about significance of BCIQ on international. The greater the individual's CQ, the more likely to control culturally diverse settings.

## Acknowledgements

This thesis is a final part of Master of Science in Business administration with specialization in international management at University of Agder, Kristiansand, Norway.

For the successfully completion of this thesis, I would like to thank my supervisors, professor Ilan Alon and Erik Lankut, for their love, support, guidelines, feedback and valuable advice and encouragement for carrying out research on the topic of "An investigation of Environmental factors effecting business cultural intelligence".

I also would like to thank University of Agder and Its administration for providing me the opportunity to complete my master's degree and carrying out this research work.

Finally, I want to thank my family and friends who bust my energy every time and support me with financial and emotional and unconditional love throughout this period.

Ashok Acharya

Kristiansand, June 2019

# **Table of Contents**

Abs	stract.			i
Acl	knowl	edge	ments	iii
Tab	ole of	Cont	ents	iv
1	Intro	oduct	ion	7
1	.1	Cult	ture and Institutions	7
1	.2	Role	e and Effects of Institutions Distance	7
1	.3	Inst	itutions and institutions Distance Effect on Business Cultural Intelligence	9
2	Lite	ratur	e Review	9
2	2.1	Role	e of Institutions and Link between Institutions and Culture	9
2	2.2	Role	e of Institutions and Culture in International Business	11
2	2.3	Inst	itutions as Rules of Game	13
	2.3.	1	Formal Rules and Norms	14
	2.3.	2	Informal Rules and Norms	15
	2.3.	3	Rules of Game Relate to Institutions and Individual Behavior	16
2	2.4	Role	e of Institutions to Cultural Intelligence	16
2	2.5	Out	comes of Institutions	17
	2.5.	1	Governance	17
	2.5.	2	Globalization	18
	2.5.	3	Political Stability	19
	2.5.	4	Gross Domestic Product (GDP)	20
	2.5.	5	Democracy Increase BCIQ	20
	2.5.	6	Country of Residence -Birth to Business cultural intelligence	21
3	Met	hod		22
3	3.1	Data	a Sources	22
3	3.2	Proc	cess of Data Collection	23
	3.2.	1	Real-time feedback	23
	3.2.	2	Time	23
	3.2.	3	Summary Reports	23
3	3.3	Mea	nsures	24
3	3.4	Vali	dity and Reliability	25
3	3.5	Ana	lytical Model	25
3	8.6 H	ypot	heses	26
1	Find	linge	Results	26

4.1	Index CQ by Country, Demographics	28
4.2	Correlation Results	31
4.3	Present Regression Model	33
4.4	Mixed Model Regression	
4.	.4.1 Model 1: Demographic and Individual Level Variables	
4.	.4.2 Model 2: Country Level Variables and Distance Variables	
4.5	The Scatter plots	
	iscussions	
5.1	Hypothesis	
5.2	Theory vs. result	40
5.3	Theory implications	41
5.4	Future Research	41
5.5	Study Benefit	41
6 R	eferences	43
Abbrev	viation	47
	dices	
List of	f Tables	
	1: BCIQ four factors	
	2: Independent variable Definition	
	3: Descriptive statistics4: Model summary (Individual and Demographic variable)	
	5: Fixed effect of country level and distance variable	
Tuote		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
List of	f Figures	
Figure	1: Role of institutions distance	8
-	2: BCIQ-50	
_	3: birth country participants	
	4: Education level	
_	2 5: Gender	
_	7 S	
_	7: Scatter plot chart	
rigure	8: Residuals Graphs	39

#### 1 Introduction

#### 1.1 Culture and Institutions

Culture and institutions are key variables established by countries' factors, such as technology, geography, historical shocks, and others (Alesina & Giuliano, 2015). Some culture and subculture fabrics meant to preserve or promote culture establish a cultural institution (Chao & Kumar, 2010). This research paper explores culture and institutions as two schools of thoughts essential to establish determinants affecting Business cultural intelligence. Cultural institutions refer to charitable and public organizations with diverse structures depending on host countries. Alesina & Giuliano (2015) has established a causal link or correlation between culture and institutions. Individual values and beliefs are some of the factors used to evaluate the culture. On the other hand, institutions are described as the convention of the game in a community due to informal and formal challenges that regulate human interaction (North, 1990). Scott (2001) came up with the idea of three-dimensional (3D) country institutional aspects known as the cognitive, normative, and regulatory dimensions.

Legal or regulative perspectives of institutions take the form of regulations and direct the institutional activities based on legal sanctions or directives (Chao & Kumar, 2010). Previous Studies have tried to fill the research gap between culture and institutions by integrating and understanding the role of institutional distance into the global diversity productivity framework.

### 1.2 Role and Effects of Institutions Distance

Institutional distance refers to the gap between the host and home country. Xu & Shenkar, (2002) incorporates institutional distance into a conceptual model to give insights on country-specific or environmental determinants influencing Business cultural intelligence and organizational performance. It is an assessment of cross-country variances and denotes the level of dissimilarity or similarity between normative, regulatory, and cognitive institutions of two nations (Xu & Shenkar, 2002, p. 608). Institutional conceptual aspects of the organization refer to the basis of institutional distance, which is considered as the organizational environment of essential determinants of an organization's structure and performance. The role of institutions distance has a

direct effect on Business cultural intelligence, which could be of individual institutions of collective institutions. Figure 1 provides a conceptual framework showing the role of institution distance between global diversity and organizational performance.

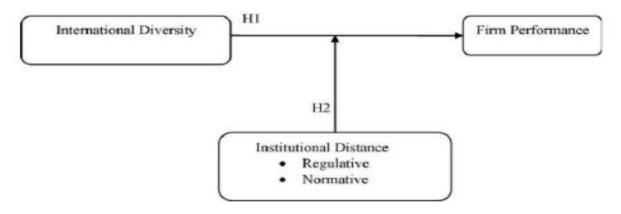


Figure 1: Role of institutions distance

Source: Chao and Kumar (2010)

The concept is relevant to the current study because it offers an insightful concept or approach to understand the effects of institutions distance and institutions on Business cultural intelligence. One key hypothesis that is tested in the current study (Xu & Shenkar, 2002) is about the effect of institution distance on institutional decisions. According to Yiu and Makino (2002), institutional distance has direct influence on international business, such as the greater the distance the higher the chances for a joint venture. Nevertheless, before making choice on what approach of entry, the international business must settle on country of investment. On the other hand, Du (2009) discovers that institutional distance extensively minimizes the international business's effort to invest. In addition, researchers acknowledge that specific institutional attributes, such as research and development intensity, social fabric, and experience, temperate the distance effect. The findings illustrate that R&D intensity reduces the consequence of institutional distance on the Foreign Direct Investment entry (Du, 2009). It is relevant to note the significant implications for policymakers and for investors to trounce the threats or constraints brought about by institutional distance.

## 1.3 Institutions and institutions Distance Effect on Business Cultural Intelligence

With an innovative assessment of Cultural intelligence quotient, the BCIQ, Alon, Boulanger, Meyers, and Taras (2016), research offers experiential proof on numerous key determinants of CQ based on professionalism across different countries. Modern research concerning the international business (IB) has significantly approved the innovation of institutions in sustaining and promoting multinational (MNE) practices and efforts. Studies show that lessening the institutional distance among nations also in the participant's distance between local interests and private activities in creating firm value (Xu & Shenkar, 2002). It has been shown that institutions can influence neighboring countries as a structure of proletariat institution to consequence encouraging value generations circumstances not just by augmented amenities acquisition or network connections through reduction international social conditions but also the consideration of CQ aspects. The aim of the current study is to use a new instrument for assessing CQ in business context, BCIQ, to assess Environmental determinants. The instrument illustrates good psychometric conditions and excellent predictive that influence or enhance better publicly attainable cultural quotient (CQ) measures that are based on various dimensions (Alon et al., 2016). BCIQ instrument has unique characteristics and merits such as a refined factor compared to existing CQ instruments, cultural knowledge measures, workplace, and business applicability, and enhanced reliability and validity. The introduction provides insightful but inconclusive information about culture, institution, and BCIQ. The rest of this study explores the research gap revolving the determinants. The paper seeks to prove or reject the hypothesis that more industrialized, democratic or globalized nations have higher Business cultural intelligence.

#### 2 Literature Review

### 2.1 Role of Institutions and Link between Institutions and Culture

Acemoglu, Johnson, and Robinson (2001) argue that historical shocks or perspectives of nations are correlated with determinants of the current institution's qualities, especially institutions that safeguard property rights from a government perspective. Instrumental variable assessment illustrates that institutional variation because of the history of a nation has a direct impact on current economic growth. In addition, empirical findings

uphold the hypothesis that the effects of history are fully catered for by current institutions (Helpman, 2004; Tabellini, 2005). Schultz, (2012); Tabellini, (2005) have established the connection between institutions and culture and connected historical data to the current economic performance of any institution. According to Tabellini (2005), institutions remain natural premises to elaborate history legacy and link the culture to the performance of organizations. Helpman (2004) argues that institutions are frequently applied as a wholesome idea that denotes dissimilar occurrences to the different populace. In a precise elucidation, they are the formal regulations of the business that transform or direct individual constraints and incentives.

Culture and institutions are connected based on the principle of performance and consistency. Research reiterates that culture is a broad concept compared to institutions. (Alesina & Giuliano, 2015) It is described as the social standards and the people's convictions that maintain Nash equilibria as a key premise of social connections (Johnson, Kulesa, Cho, & Shavitt, 2005). However, Tabellini (2005) reiterates that culture is one characteristic of generally defined institutions and plays a key role to profile individual rewards. It is relevant to conclude or interpret culture as the key influencer of people's behaviors through preferences and values. The role of institutions is to influence the society by creating rules of the game from a holistic perspective of any social, legal, governance, and political fabric of a community.

According to Johnson et al. (2005), people with enhanced CQ levels accomplish objectives in a reverential and efficient manner whichever the cultural situation. No matter how ethnically diverse an institution is, individuals may not always remember the diversity of perceptive, experiences, and perceptions, which result to issues with performance and relationships to minimize workplace constraints or friction (Johnson et al., 2005). CQ helps people to acquire a better comprehension of cultures that shape their positive attitude and empathetic approach with other people from diverse backgrounds (Young, Haffejee, & Corsun, 2017). Institutions are places or agencies for shaping individuals' perceptions and behaviors based on rules and regulations to maintain cultural aspects. Effective institutions have influential regulations and rules to minimize conflicts and constraints among people.

#### 2.2 Role of Institutions and Culture in International Business

The most significant study theme around the international business (IB) is the research about global diversity-performance connection. The role of institutions is pronounced in all kinds of organizations. For example, in-profit businesses or organizations must sustain financial obligation to comply with tax law demands (Chao & Kumar, 2010). Social or normative perspectives of institutions normally surface as the rule of thumb, educational curricula, standard operating processes, and employment regulations. The impact or necessity of such measures to regulate institutional action comes from professionalism or social responsibility. For instance, bribery and gift giving could be a commonly acknowledged standard in up-and-coming economies, such as Africa countries, India, China, and others. Cognitive aspects of institutions embrace supportive factors and cultural rules and models (Tabellini, 2005; Chao & Kumar, 2010). Recent empirical findings demonstrate the significance of cultural determinants based on many economic options, which influence the speed of growth and the nation's economic growth (GDP). Experts are striving to enhance understanding of the institutional roles and cultural influence in IB. In this paper, the aim is to investigate specific mechanism revolving around the relationship between institutions and culture. This is important because it helps to give more insights about environmental factors influencing BCIQ.

Tabellini (2005) argues that culture and institutions could be vague in the literature based on space definition or differently. The two concepts are significant variables, indomitable, perhaps, by location, epidemics, technology, historical challenges, and other factors (Chao & Kumar, 2010). There are a causal link and acceptance interaction between culture and institutions. Cultural beliefs are essential for institutions because they govern interactions between individuals, groups, and institutions but differ from knowledge due to research gap or insufficient analytical proof or empirical discovery (Konara & Shirodkar, 2017). Cultural beliefs have become indistinguishable and frequently communicated and sustained. Greif (1994) asserts the significance of rational cultural convictions that are expected to capture people potential with reverence to practices that some people will take in diverse contingencies. Historical cultural beliefs maintained by Nash equilibria offer a fundamental point in repeated social connections

based on multiple equilibria (Tabellini, 2005). The rule of institutions is designed to ensure that interactions among stakeholders in international business and countries.

The regulatory environment of institutions revolves around factors such as laws or regulations, constitutions, and property rights. They also differ in diverse nations that result in regulative distance affecting the host and home countries (Greif, 1994). Formal rules and regulations controlling and protecting intellectual assets rights are more comprehensive, evidently stipulated and enhanced in America than in China (Chao & Kumar, 2010). The concept creates a regulative distance between China and America. In addition, countries vary considerably on normative perspectives comprising determinants namely values, informal norms, and activities meant to shape and guide decisions and behavior. Some nations, such as Japan and Taiwan, value the communal logic of labor, success, and self-importance and recognize a structured framework of operation, whereas other nations like the U.S. and the UK value individualism, individual objective attainment and a flatter-structured framework of procedure (Chao & Kumar, 2010). Here, the concept shows that the role of institutions is to regulate the culture of organization and nations.

According to Hernandez and Nieto (2015), nations vary concerning the aspects of cognitive, normative, and regulative institutions dominating the social organizations and context-industry perspectives. Emerging economy nations greatly regulated or controlled economies because of the government obligatory policies and controls on labor, capital, and markets determinants. These nations face strict import, interior foreign direct investment (FDI) controls, and licensing regulations in different industries applicable to keep low competition levels between foreign and local businesses (Chao & Kumar, 2010). The likelihood of institutional distance dominating or instilling asymmetric effects on emergence or investment of multinational enterprises (MNEs) attracts new researchers' attention and urge for further studies. Based on this perception, it is relevant to re-evaluate the connection defined and interpreted by Hernandez and Nieto (2015) regarding the consequence of the course of authoritarian institutional distance on international businesses' option concerning the investment choice while investing in a host nation. Konara and Shirodkar (2017) extend the study by concentrating on the perspective of up-and-coming markets and accounting for the huge diversity of IB

concerning institutions through based on both small and large organizations, and stipulating home and host nations. On the contrary, to Hernandez and Nieto's (2015) research, Konara and Shirodkar (2017) find that institutionally distant international businesses are keen on full-ownership strategy when they come from institutionally based home nations than the host (emerging) nation and are likely to opt for joint-ownership business strategy when home country has weaker institutions compared to host country. The two authors discuss their findings with reverence to Hernandez and Nieto's research that explored the connection or correlation between emerging and dominant market context, and between large and small businesses.

#### 2.3 Institutions as Rules of Game

North's institution is defined as:

The institutions-as-rules approach, following North (1990, p. 3), identifies institutions as "the rules of the game in a society, including both formal rules such as constitutions and laws enforced by the state, and informal constraints such as codes of conduct, norms of behavior, and conventions, which are implemented by institutions" (North, 1990, p. 3).

The quote is essential for this paper because it gives insightful reference to institutions as the guidance or regulator of businesses and concepts of culture adherence. Schofield and Caballero (2011) explain that the rule of the game has formal and informal rules to guide interaction and behaviors of individuals and institutions. The authors continue to reiterate that most of the formal rules are selected based on the federal procedure of negotiating and political constraints between organizations and individuals seeking to change the regulation for individual or agency gains. Formal or informal rules could also be chosen in a democratic approach through fair competition among different institutional categories (Schofield & Caballero, 2011). However, Greif and Kingston (2011) hold that in either formal or informal case, the institutions-as-rules perspectives or aspects maintain that organizations are ultimately best comprehended from an operational aspect that acknowledges the responsiveness to the wellbeing and necessities of the founders. The experts continue to explain that within the institutions-as-rules outlook, the implementation of the regulations or rules is regarded as a distinct matter from the

structure and arrangement of the regulations. Implementing the regulations encompasses "enforcement costs" (Greif & Kingston, 2011). The informal and formal rules have unique enforcement features that compose the institutional framework based on an interactions approach. Consequently, the institutions as rules aspect involve the use of rational option perception to learn and study the configuration of organizations without integrating a theory of motivation (Schofield & Caballero, 2011). However, recent studies are incorporating the concept of motivation as one aspect of enforcement rules through the study of 'institutions-as-equilibria.' The 'institutions-as-equilibria' perspective concentrates on connections among determined institutions creating the structure to motivate all the involved stakeholders (Greif & Kingston, 2011). For example, in America, citizens drive while maintaining the right-hand side of roads. In this case, people drive on the right because the institutions and individuals motivate the culture and they do so to avoid accidents. However, if the rules were divided, such men drive on left and women on right then the institution would have failed to motivate a pattern of rule and such patterns are not equilibria (Schofield & Caballero, 2011). A similar reason is applicable in examining various aspects of institutions such as political, economic, and social based on informal and formal aspects or rules. From the institutions-as-equilibria aspects, it is essential that rules and regulations play a part in creating equilibrium and a balance.

#### 2.3.1 Formal Rules and Norms

The connection of culture on formal institutions is best illustrated using historical narratives of certain cases (Alesina & Giuliano, 2015). For example, Muslim norms and beliefs led them to form different institutions from the individualistic aspects of Christian. They developed formal institutions to guide their collectivistic cultural beliefs through codified contract regulations and laws. To separate the consequence of formal organizations on culture, it is imperative that one recognizes institutional transformations, which are sensibly connected to cultural changes (Alesina & Giuliano, 2015). Institutions are like simulated societies of people brought jointly or mutually for an explicit objective, such as manufacturing, recreation, religious worship, political activity, and others (Greif

& Kingston, 2011). Whereas some institutions could start as informal aspects or institutions whose stakeholders change the structure to create a formal management structure, others are generally created in a formal way from the start with profit or non-profit objectives in mind. Therefore, it is reasonable to say that institutions are both consistent agencies affecting and interacting based on a broader aspect of the environment or world around, and domination frameworks created through formal rules to control the connections between and among members and outsiders (Greif & Kingston, 2011). The formal institutions are constructs of institutions of the rule of the game since they are formed based on codified laws and regulations.

#### 2.3.2 Informal Rules and Norms

Within the institutions- as-rules concept, various scholars have concentrated on the formal and informal aspects of institutions. Notably, Douglass North is one of the authors who have treated institutions as principally as integrated entities allowing the connection between various players. Institutions interact with the wider political and economic entities inside that are embedded in ensuring that players of various aspects such as the political game, trying to change wider aspect institutional rules for own benefits are controlled (Schofield & Caballero, 2011). This aspect of institutions is discussed based on politics, internal governance, and economic. Understandingly, the contemporary hypothesis of the institutions came with Coase's (1937) highlights that markets and organizations are substitute aspects of institution dealings and the assertion that the level of practices based on organizations requirements that determine and reduces "transactions costs." It has become a common perception that to explain the institution structure, researchers need to elucidate its operations and the contractual setting based on efficient solutions (Greif & Kingston, 2011). Nevertheless, why would well-organized institutions emerge from, a possible answer is structures and formulated methods? The likelihood is based on that the arrangement of institutions as a product of a coherent plan. When the institution's founders have the right perception of the consequence of diverse organizational structures, then they are able to create efficient firms (Moua, 2010). The assumption that institutions are efficiently managed underpins the concept that optimal incentive mechanisms based on motivated workers based on the property rights. The concept is based on the principle of Hart (1995), which hypothesizes the existence of

limitation based on the firm to determine efficiency and minimize the complications concerning contracts and aspects of mechanism design.

Culture is an influential part of organizations that concern informal structures and other aspects of the organization. Corporate culture is one of the informal rules and norms, which develop using well-structured organizations and firms (Greif & Kingston, 2011). The internal control of institutions characteristically comprises of a mixture of both informal and formal regulations. For instance, one strategy trounces the principal-stakeholder challenge concerning organization and various aspects of an institution through optimal compensation structures and contractible measures.

#### 2.3.3 Rules of Game Relate to Institutions and Individual Behavior

Based on Yoram Barzel's Hobbesian theory of the state's origins, individuals start to build their territory or firm in a state of personality devoid of institutions and guide by formal and informal rules to provide order (Barzel, 2002). Nevertheless, they desire to limit the state's capacity of practices involves raises the issue of why the state should obey the "rules" or create it for subjects, instead of using expropriate involving the rules and expanding the capacity scope. Barzel (2002) notes the possible danger of rule to individual behavior and hypothesizes that prior to creating a state; individuals should create collective-action approaches that limit the state's activities if they become predatory. Nevertheless, in maintaining the institutions-as-rules strategy, Barzel considers the implementation of the joint action approach as exogenous (Greif & Kingston, 2011). The institutions as rule of game relate to individual behavior and institutions. The rule of informal and formal norms and standards apply to both individual behavior and institution functions.

## 2.4 Role of Institutions to Cultural Intelligence

The role of institutions is anchored on to the regulations to control operations and culture. The unique characteristics and merits of the present BCIQ instrument are a refined factor, objective cultural knowledge, applicability in workplace and businesses, and enhanced validity and reliability (Alon et al., 2016). The BCIQ is appropriate for assessing CQ involving international expatriates and employees. Livermore (2009) explains that the role of institutions is measured by the capability of dealing with diversities in workplaces

and behaviors determined by operating in a mix of cultures to maximize business benefits.

Thomas et al. (2008) describe the CQ as a mechanism of linking skills and knowledge, connected by educational meta-cognition based on allowing individuals to become accustomed, decide on, and transform the cultural perspectives of their settings. This includes harnessing adaptive knowledge and a collection of management conducts based on effective intercultural conditions or settings (Thomas et al., 2008). Simply, the greater the individual's CQ, the more probable to efficiently control culturally diverse conditions (Ang et al., 2007). CQ improves teamwork, communication, performance, and cooperation as key factors for a competitive edge for any organization.

The connection between institutions and culture tend to separate one causal feature, supporting the directional aspect of businesses (Alesina & Giuliano, 2015). A potential study has emphasized on a criticism outcome concerning the interdependence for institutions and culture evolving due to multiple steady equilibria of diverse and self-regulating cultural and institutions rules and norms (Alesina & Giuliano, 2015). The relationship between institutions and CQ is a mutual benefit based on the outcome of enhanced characteristics of individuals and organization.

#### 2.5 Outcomes of Institutions

The outcomes of institutions and culture relationship are tied to governance, globalization, political stability, GDP, institutional distance (home and host country), and other factors. For this paper, the outcomes of institutions relate to various aspects of countries specific or environmental factors when dealing with foreign, local, and international businesses.

#### 2.5.1 Governance

In the modern context, countries are identified as consisting of numerous identity groupings with the nation's governing team or polity manifesting different degrees of efficient governance, territorial control, and population inclusion within its localized boundaries (Barma, 2012). An imperative aspect of governance is the liaison of distinctive groups to government and ruling regime (Marshall, Gurr, & Jaggers, 2018). Political individuals acting on behalf of distinct territorial groups may acknowledge or

resist the ruling authority or could reject that power based on the Hirschman's "loyalty, voice, or exit" choices (Marshall et al., 2018). The institution's regulations will determine any business progress based on the governance structure and approaches. The option of rejection has a consequence of a substitute identity group's organizing different forces based on preventing "foreign" governance from determining or enforcing a new polity and exiting or eliminating the group's protective foundation from the efficient or valuable control after rejecting polity (Marshall et al., 2018). Governance is an outcome of institutional regulations for control measures for any organizational activities within the host country.

#### 2.5.2 Globalization

Griffin (2003) explains that economic globalization is minimizing the implication of state controls. Experts argue that most countries have an international economy but have no institutions essential for global governance. One-sided action by a hegemonic society is unsustainable for long-term aspects and consequently need to extend the discussion about global governance (Griffin, 2003). Alon et al., (2016) give some insightful context about the benefits and overheads of globalization due to an asymmetrical distribution that has led to a detrimental aspect of putting the destitute population in emerging nations at more disadvantages. The concept is applicable especially when it comes to the creation of intellectual property rights and free relocation of the low-skilled labor force in these countries. The World Trade Organization is an institution that should be observed as the rule of the game based on the international ground and a counterbalance to unilateralism based on globalization aspects. Global economic liberalism must be put equilibrium by institutions offering global public products and intercontinental aspects of monetary control (Griffin, 2003). It is relevant to note that the outcome of the empirical findings exhibits or imply a further deteriorating of state autonomy and a necessity to guarantee that international institutions are self-governing and could be accountable to population globally for performance.

According to Alon et al., (2016), the pervasive outcome of globalization has extended beyond political shifts or limitation of global economic. The connection between different people from dissimilar cultures is swiftly fitting a component of the job depiction for individuals in different professions (Alon et al., 2016). For many decades,

the executives and politicians have enjoyed the prerogative about the interaction across culture. However, today all people across different professions are encountering foreigners and different people in their businesses and personal lives due to globalization. The cross-cultural connections happen in the fundamental monarchy through a variety of social communication and connections based on online networking platforms (Stanko and Gibson, 2009). The global institutional shift has encouraged the effective international population to deal with a different group of individuals from various aspects of ambiguous settings. The outcome measures the global knowledge of business executives while they are doing businesses in foreign countries with diverse cultures and institutional distance.

## 2.5.3 Political Stability

The outcome of institutions is also influenced by the political status of political stability. Barma (2012) explains that the Polity project has demonstrated the worth to scholars for years, turning out to be the most broadly employed resource for supervising government shift and learning the outcomes of regime influence. Ted Gurr is appreciated as the director of the Polity project that has helped to give insights on the issue of political stability and outcome (Marshall et al., 2018). The layout of the Polity statistics has changed to focus on persistence and shift in the polity as a constituent of assessment based on polity case format based on country-year case structure (Griffin, 2003). A research group under the guise of Nils Petter Gleditsch checked the innovative Polity I structure and data regarding the polity changes as polity become a fundamental data scheme for global analysis procedures (Griffin, 2003). The political stability of a country has a positive influence on societal and systemic expansion procedures and necessitate essential data for state continuity, Polity foci, and country-year format and government consistency and polity-case format transformation be mutual in a data reserve base (Marshall et al., 2018). Political stability has an influence on authority patterns and measures concerning the power patterns of different governments and authority concerns based on the authority outcome and state regime concerns (Marshall et al., 2018). The institution's outcome regarding political stability is based on the country's stability based on culture and facilitation of suitable environment for international business and operation.

## 2.5.4 Gross Domestic Product (GDP)

Institutional outcomes based on GDP is directly associated with industrialized and emerging nations economic capacity. Tabellini (2005) explains that the per capita gross value-added (GVA) is essential for measuring today's economic growth through the international price indices and attuned purchasing power. The culture of a country has an influence on the per capita GVA concerning economic capacity.

## 2.5.5 Democracy Increase BCIQ

Comprehending the fundamental causes of democratization has been pointed out as a key factor in answering questions concerning social science. Lipset (1959) accentuates the significance of economic growth of a country based on its outcome. Consequently, most of the experiential context has concentrated on the precise factor; nevertheless, study shows a causal link between democracy and development involving cross-sectional statistics, and data analysis (Acemoglu et al., 2008). Almond and Verba (1963) are regarded as the first scholars who first attempted to measure the significance of culture for a democratic system. The researchers conducted a qualitative survey involving 1,000 participants from five nations, such as Great Britain, the United States, Germany, Italy, and Mexico, based on political attitudes. They discovered that political culture is vital to the function of any regime or country system. Gorodnichenko and Roland (2013) conducted a recent study to give insight into the significance of culture as a force of democratization. Based on collectivist and individualist cultures, the researchers were able to show that countries with an individualistic culture are less able to overcome problems associated with collectivist challenges. However, they are likely to adopt democracy more than collectivist culture nations. Literature review shows a strong causal link between individualistic cultures to common polity outcome, and regulation of other democracy determinants (Alesina & Giuliano, 2015). To institute the link, the researchers use two instrumental variables namely a measure of institutional distance between nations and an assessment of historical pathogen occurrence. The concept was to demonstrate that collectivism and individualism affect the performance of democracy and the result showed that individualism is vital for economic growth (Alesina & Giuliano,

2015). Democracy influences the business cultural intelligence quotient of any nation because of the collectivism and individualism aspects of the population.

## 2.5.6 Country of Residence -Birth to Business cultural intelligence

Xu and Shenkar (2002) describe institutional distance as the gap between the home and host nations. Institutional distance is an essential model to give insights on the country of residence or birth country when exploring Business cultural intelligence and managerial performance. The concept is fundamental for evaluating cross-country variances and highlighting similarity and dissimilarity among regulatory, normative, and cognitive aspects of two nations (Xu & Shenkar, 2002). Mudambi and Kiyak (2015) expand the discussion of CQ significance and measurability through examination of factors of CQ ranking the outcome based on importance priority. The research instrument, BCIQ, is a validated assessment instrument involving behavioral, attitudinal, and cognitive features of CQ (Alon et al., 2016). The authors found out that country-lived-in (country of residence), education level and the number of languages spoken by an individual are one of significant determinants when measuring the business cultural intelligence (Alon et al., 2016). The researchers emphasize the importance of country of residence or birth when assessing business cultural intelligence.

The study shows the significance of capability to function efficiently in the cross-cultural circumstances concerning an important skill needed for institutional and individual success. The ability to identify and plot a course through cultural cues, converse and bargain across different ethical perspectives, shun challenges and attain wanted results when handling individuals from diverse cultural settings and establish satisfaction of all involved entities (Xu & Shenkar, 2002). Alon et al. (2016) examine the factors of CI through the BCIQ dimensions, and present key factors leading to business cultural intelligence among business experts. The researchers found that the level of BCIQ differ among the different countries examined prompting an interpretation that country-specific variables influence the business community and the capability to transact globally (Alon et al., 2016). It is evident to say that different countries have a different influence on BCIQ because of culture antecedent. The BCIQ is built up of four factors as shown in Table 1.

Table 1: BCIQ four factors

Factor	Name	Definition
BCIQ1	Motivation	An assumed force operating internally that induces and individual to choose one action over another, specifically choices supporting openness to new ideas, interpersonal relationships, cultural identities, and experiences
BCIQ2	Listening, Communication, and Adaptation	The cross-cultural utilization of baseline verbal/nonverbal awareness regarding social practices and how information is exchanged. Also, the ability to accurately modify and adapt actions according to the situation
BCIQ3	Cognitive Preparation	The self-study of appropriate cross-cultural behavior/business practices
BCIQ4	Global Knowledge	The level of general knowledge about other cultures in terms of facts, customs, practices, norms, and values.

Source: Alon et al., 2016

Motivation, adaptation, cognitive, and global knowledge are essential antecedents that must be considered by international businesses. The concepts are key because they determine success entry or business operations in host countries.

#### 3 Method

This section consists the method of data collection, data analysis, tools and method used to analysis, and its reliability and validity.

### 3.1 Data Sources

This research work is based on data from different secondary sources. GDP per capita data is collected form world bank global database for GDP assessment of 130 countries for a period of 4 years (2014 to 2017). The GDP and purchasing power parity (PPP) are measuring elements for this paper. GDP is transformed into global dollars using PPP. The data mining comprises of production antecedents of various countries.

Institutional data are collected from the polity iv project for a 4 year (2014 to 2017). Polity iv project collect political regime characteristics and transitions of 152 countries with six dimensions. Globalization data are collected from the KOF index of globalization, which measures the degree of economic, political and social globalization of 122 countries. The BCIQ results or responses were compiled from 1170 participants or business executives and business students (N=1170) from 39 different countries of birth, living in 17 different countries. To make the date reliable and equally distributed Respondents from united states and Colombia are removed from the residence country because these countries has high number of respondents and country like Indonesia,

Egypt, Denmark, south Korea etc. also not included in this study because of very low number of respondents.

#### 3.2 Process of Data Collection

Survey participants responded to questions that tested the six key factors of BCIQ. The questions correlated with the four CQ measures: BCIQ1, BCIQ2, BCIQ3, and BCIQ4 (Alon et al., 2016). BCIQ is an online measurement tool intended to evaluate the capability of persons to change to new cultures and adapt to the social, emotional, and cognitive determinant. BCIQ is an innovative and stimulating evaluation instrument created to assess and, afterward, build up CQ among business executives and other stakeholders who are engaging in international businesses and projects (Alon et al., 2016). The instrument is applicable for this study because it offers an opportunity to measure an environmental factor influencing international businesses.

#### 3.2.1 Real-time feedback

The software platform permits a researcher to collect instantaneous feedback on participants' meta-cognition skills, cross-cultural capability, and cultural knowledge through a comparison of feedback or responses to a huge pool of responses. The number of questions that were asked is 50 as illustrated

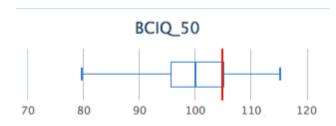


Figure 2: BCIQ-50

#### 3.2.2 Time

Participants were informed that the survey session lasts for about 10 to 515 minutes to complete simple 50 questions and demographics details. Survey was simple to respond to since the questions have prompt responses based on Likert scales, such as 1-5.

## 3.2.3 Summary Reports

The researcher is provided with data in a form of a report containing all the participants' feedbacks from the cohort after a confirmation that assessment was completed. The data collected has characteristics of the reference dataset for cohort result comparison. The BCIQ provides comprehensive summary report for interpretation and understanding of the outcome.

### 3.3 Measures

The dependent variables in this study is BCIQ score. The study uses the tests or BCIQ measures to demonstrate how national-level cultural and socio-demographic variables influence international businesses (Möller & Eisend, 2010). The survey data from 1170 participants from 39 birth countries are analyzed using regression and correlation modeling to demonstrate the culture and institutional distance. The measures give insights on what business executives feel about culture and business experiences between host and home country (institutional distance).

## BCIQ measures

- MOTI: Motivation (engages different groups and open to new cultural encounters)
- COMM: Adaptive Communicative behavior (observes and adapts to the communication norms of the culture)
- SENS: Active Listening and Perceptual Sensitivity (empathetic with the environment and non-verbal clues)
- PREP: Cognitive Preparation and Learning Behavior (learn new cultures)
- AWAR: Cognitive Awareness (understand cultures from international perspectives)
- KNOW: Global Knowledge (understand the political, cultural, and sociocultural regulations of different nations (Alon et al., 2016)

This assessment tool measures and creates cultural intelligence of institutional managers, executives, business learners, and others who engage in global projects and programs. CQ is regarded as a key determinant in IB success. A lately validated scale, BCIQ, synthesizes the CQ idea by using it absolutely to the business perspective. The BCIQ purpose is to predict lasting cross-cultural achievement based on a blend of CQ

determinants or antecedents, cognitive aspects, and quantifiable independent variables (Alon et al., 2016). The model allows for the multigroup investigative data analysis strategy for various countries.

Global knowledge is one of the key aspects considered during the study to test the cultural knowledge of participants. Earlier researchers who have used BCIQ dimensions across countries using various professionals have found evidence concerning the construct validity and suitability for cross-cultural usages (Velez-Calle, Roman-Calderon, & Robledo-Ardila, 2018). By understanding, BCIQ is a consistent and reliable cross-cultural tool for assessing CQ in business context makes it a suitable instrument for the current study. Therefore, the measurement tool was most appropriate for this paper because its real-time functionalities allowed for the collection of a huge data set from very large sample size and across nations. The measures are also testable since they involve perceptions of individuals and are straightforward for any group of participants.

## 3.4 Validity and Reliability

The BCIQ instrument is applicable and relevant to this study because it has been validated through numerous large studies. A latest article describing its reliability and validity features was published in 2016 in CCSMJ titled "The Development and Validation of the Business Cultural Intelligence Quotient" (Alon et al., 2016). BCIQ has been tested and its reliability and validity approved. It has a capacity to evaluate or assess people's adjustment or adaptation to new cultures and main factors that are evaluated are emotional, social, and cognitive.

### 3.5 Analytical Model

The analytical tools used for this study is SPSS application that has the functional capability to present outcome statistically, graphically, and descriptive statistics (Parziale & IBM Corporation, 2016). Specifically, the analysis of data concentrates on the mixed-model regression analysis due to the huge dataset collected and various subjects tested. Mixed-model regression analysis is an explicit tool for evaluating longitudinal data dealing with subject's variables that properly deals with within- and between-subjects variance (Dongen, Olofsen, Dinges, & Maislin, 2004). The expression "mixed model" denotes the inclusion of fixed effects and random effects. The former effects depicts the

model elements used to describe the systematic relationships or correlations, such as overall transformations over time and experimentally instigated by the group variances while the latter effects account for variability of subjects creating the systematic correlation captured by the latter effects (Dongen et al., 2004). Many studies have shown that mixed-model regression strategy is a technique that helps researchers to analyze longitudinal data with large inter-individual variances. The conventional repeated-measures assessment of variance (ANOVA) is applied against methodical interindividual unpredictability (Dongen et al., 2004). The data is also reanalyzed with linear mixed-model regression analysis to properly consider the interindividual variances (Dongen et al., 2004). The findings section shows correlation, regression, demographic statistics, and analysis of data due to SPSS functionalities.

# 3.6 Hypotheses

Analyses were conducted with mixed-model regression that takes into consideration the random and fixed effects of combined data. The first alternative hypothesis (H1) was more globalized countries have higher BCIQ. The second hypothesis (H2) was more democratic countries has higher BCIQ and third hypothesis (H3) was High GDP countries has higher BCIQ.

### 4 Findings/Results

The findings are the output of responses and feedback from the participants or selection of dataset from the global database. The findings are evidence-based data collected using the BCIQ tool, interpreted, and presented by SPSS statistical applications. Table 2 presents the independent variable definitions to help understand the findings generated from the SPSS.

Table 2: Independent variable Definition

Residence country	Birth country	Meaning	
R_KOFGI B_KOFGI		Overall globalization	
R_DEMO	B_DEMO	Institutionalized Democracy	

R_AUTO	B_AUTO	Institutionalized Autocracy	
R_POLITY	B_POLITY	Combined Polity Score	
		(Democracy – autocracy)	
R_GDP CAPITA	B_GDP CAPITA	Gross domestic product per capita	
R_KOFECGI	B_KOFECGI	Economic globalization	
R_KOFSOGI	B_KOFSOGI	Social globalization	
R_KOFTRGI	B_KOFTRGI	Technological globalization	
R_KOFCUGI	B_KOFCUGI	Cultural globalization	
R_KOFFIGI	B_KOFFIGI	Financial globalization	
R_KOFPOGI	B_KOFPOGI	Political globalization	
R_PARCOMP	B_PARCOMP	The Competitiveness of Participation	
R_ XRREG	B_ XRREG	Regulation of Chief Executive Recruitment	
R_EXREC	B_EXREC	Executive Recruitment concept	
R_EXCONST	B_EXCONST	Executive Constraints concept	
R_POLCOMP	B_ POLCOMP	Political Competition concept	
R_ XRCOMP	B_ XRCOMP	Competitiveness of Executive Recruitment	
R_XROPEN	B_XROPEN	Openness of Executive Recruitment	
R_XCONST	B_XCONST	Executive Constraints	
R_PARREG	B_PARREG	Regulation of Participation	

DELTA_KOFGI	Overall Globalization distance between country of birth and residence
DELTA_WEALTH	Difference in GDP per capita between country of birth and residence.
DELTA_POLITY	Distance in political stability between country of birth and
EUCLIDIANCULTURAL DISTANCE	Hofstede's cultural dimensions distance between country of birth and residence.

Source: (Polity iv project, 2018; World bank, 2018)

Note: Distance variables are calculated by country of birth variable minus country of residence.

# 4.1 Index CQ by Country, Demographics

Figure 3 presents the frequency of the participants based on the birth-country. It is evident that most of the participants (over 150) were from India. The statistics are relevant to this study because it confirms that the information gathered was from different countries.

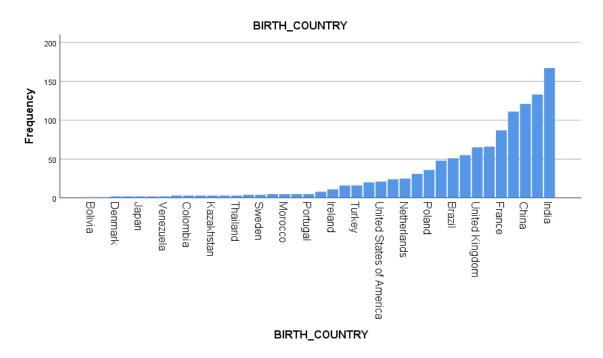


Figure 3: birth country participants

Figure 4 shows that most of the participants had above University or College Degree (32.05%), a postgraduate degree (21.14%), and some post-secondary (27.83%). This demographic statistic is essential because it shows that most of the participants were business executives or business students who were knowledgeable about the study subject. Therefore, their responses are reliable and valid for consideration.

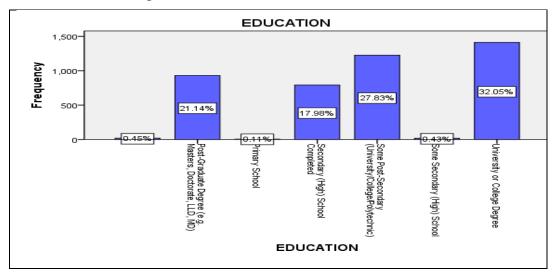


Figure 4: Education level

Figure 5 displays that more men (49.7%) participated in the research than women (49.4%) do and people prefer not to say their gender is 0.9%. The finding is necessary to show that the research was conducted in a transparent manner to allow all legible participants to take part. Therefore, it is reasonable to say that the outcome of the study can be generalized to the larger population.

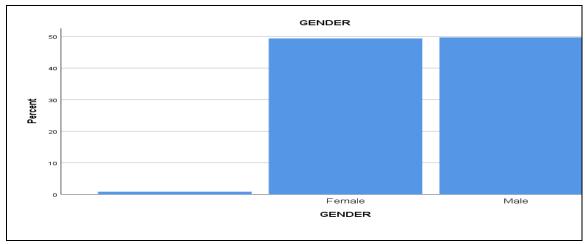


Figure 5: Gender

Figure 6 reveals that most of the participants were business executives between the age of 20 years old and 24 years old. The findings correlate with the study measurement since an online instrument was used to collect the data. Majority of individuals who use the internet and online tools fall under the bracket highlighted.

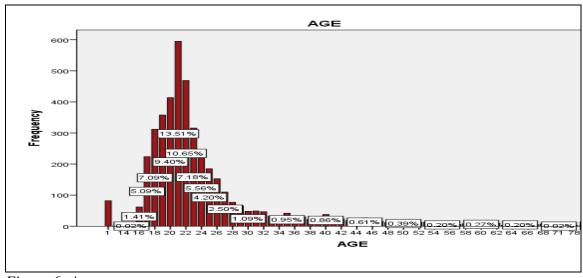


Figure 6: Age

The demographic result is essential for verifying the suitability of the participants. When appropriateness of participants for any research has been vetted and confirmed, then the validity and reliability of the findings are easy to assess.

Descriptive statistics (see appendix 1) of the six BCIQ variables in the study model based on country by birth for many countries of different capacities and characteristics. The table presents the average scores for BCIQ scores and individual elements of BCIQ factors. On averagely, there appears to be minimal BCIQ-50 scores variation between countries, such as 92 for Japan and 105 for the United States. The data show significant differences in the cultural intelligence of individuals whose residence country is not the birth country. The international participants showed varying scores based on the cultural experience or similarity with current country of residence (the U.S.). Many country's characteristics, variances, or subjects determine the different BCIQ scores mean but it is relevant to note that CQ is closely related because interindividuals capacity to understand cultural intelligence on international businesses.

## PLEASE INSERT TABLE FROM APPENDIX 1

## 4.2 Correlation Results

The six components of BCIQ are represented by F1 to F6 (see appendix 2). Birth of country the same indicates whether the participant are native or international orientation. Countries lived in denotes the number of countries a participant has lived in more than six months apart from country of origin, and gender and education are some of demographic variables tested. The data shows positive correlation between BCIQ score and birth country, education, and countries lived in but negative correlation with gender. The gender finding is necessary to show that the research was conducted in a transparent manner to allow all legible participants to take part. Therefore, it is reasonable to say that the outcome of the study can be generalized to the larger population. The results depicts significance of country's characteristics to cultural intelligence of an individual while gender may return a vice versa outcome.

## PLEASE INSERT TABLE FROM APPENDIX 2

On particular components of BCIQ, country orientation has positive correlation with Motivation while gender and education show negative correlation to this element. Arguably, culture is mostly determined by country settings and not individual characteristics; therefore, the outcome is relevant. On Adaptive Communication Behavior, the data shows positive correlation with education and country orientation but negative relationship with gender. For Cognitive Preparation and learning, the result is similar to previous element's outcome. For Active Listening and perceptual Sensitivity, finding shows positive correlation with countries lived in and education but negative correlation with birth country and gender. For Cognitive Awareness, the result shows positive correlation with the three variables apart from birth of country. Lastly, for Global Knowledge, the result shows positive correlation with all the variables. Data shows a positive (.479) correlation between KNOW of business personnel and residence country culture for investments or business operations. This is a clear indication that globalize countries have high BCIQ.

This education statistic is essential because it shows that most of the participants were business executives or business students who were knowledgeable about the study subject. Therefore, their responses are reliable and valid for consideration.

The demographics and BCIQ is measurable through a correlation between birth and residence outcome. Concisely, the finding shows that the relationship between birth and residence country for any international business is significant (.01). Table (see appendix 2) shows a positive (.249) correlation between countries lived in and BCIQ scores (globalization tested). In addition, the table shows a significant (.01) correlation between the two variables. Interpretably, the outcome implies that home country has a significant bearing on international businesses depending of the BCIQ factors. The result implies that residence countries have direct implication on businesses based on the cultural intelligence of its institutions.

Data shows a positive (.157) correlation between AWAR of individuals and culture of residence country for IB operations. In addition, the data reveals a positive (.079) correlation between SENS of business executive and culture of residence country for international business operations. The table (see appendix 2) also shows a positive (.16)

correlation or relationship between host country and COMM culture of the business executive. Similarly, it reveals a positive (.238) correlation between host country and MOTI culture of the business people. Lastly, there is a positive (.149) correlation or relationship between PREP of individuals and residence country for investment or business operations.

## 4.3 Present Regression Model

Regression analysis is essential for evaluating the trends of data and statistics. It allows for predictions and considerations of possible trends. P-Value and correlation coefficients determine how the analytical model used is accurate and appropriate (Wegner, 2007). Table 3 shows demographic statistics of main factors assessed during the study. These are Trade Globalisation (KOFTrGI), Financial Globalisation (KOFFiGI), Interpersonal Globalisation (KOFIpGI), Cultural Globalisation (KOFCuGI), and Political Globalisation (KOFPoGI). The statistics N represents only the valid responses missing values are excluded.

Table 3 displays the mean and standard deviations of various institutional outcomes as measured on the BCIQ scale. The outcome shows that on average political stability (polity), globalization (KOF), Trade, Financial, Interpersonal, Cultural, and GDP of a country are most important factors for BCIQ assessment. However, autocracy and cultural mahadistance have low average that leans toward least important. KOF Globalization Index determines and assesses the political, economic, and social perspectives of globalization. It measures the rate of globalization in countries across the globe. The finding shows that globalization is the of countries' specific determinants effecting BCIQ since it is a defector in all the variables.

The outcome implies that these variables can be perfectly predicted from other independent variables. It means that globalization, governance, economic growth, and political stability of a country is influenced by other factors when BCIQ is measured and cultural intelligence tested. The mean std error zero values meaning the variance in these determinants is already catered for by other predictors. In this case, they could have been taken care of by institutional distance and CQ of individuals.

Table 3: Descriptive statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
BCIQ_50_SCORE	1170	74.5585	115.3811	99.432366	.1763738	6.0329125
BCIQ_50_MEAN	0					
R_KOFGI	1167	59.1965560913 08690	90.9748001098 63380	78.4143722913 36220	.310335112817 208	10.6014762454 33583
R_KOFEcGI	1167	35.4042015075 68460	89.1706771850 58700	65.3360094987 33500	.450534030750 303	15.3908649955 84872
R_KOFTrGI	1167	27.7797718048 09670	88.8037567138 67290	61.5274523250 44680	.436941477125 418	14.9265245828 58448
R_KOFFIGI	1167	40.8430824279 78600	92.1029968261 71970	69.1445657555 22140	.488106101035 551	16.6743788300 49232
R_KOFSoGI	1167	50.1771202087 40334	90.3028869628 90720	76.3059678392 32170	.409484276862 517	13.9885486841 24744
R_KOFIpGI	1167	34.4132232666 01660	88.7934951782 22760	67.6899573939 82940	.571986643865 811	19.5398540713 02834
R_KOFCuGI	1167	52.3953742980 95800	95.1327209472 65720	78.3155518722 20940	.436182710015 234	14.9006040499 82197
R_KOFPoGI	1167	76.4383087158 20410	98.2803955078 12600	93.6011472308 13740	.151837598670 400	5.18698216535 8571
B_KOFInGI	1166	50.7106666564 94240	95.8247680664 06350	81.9293890768 21890	.284883158444 800	9.72783175654 7351
B_polity	1170	-7	10	7.35	.156	5.336
B_autoc	1170	0	7	.84	.064	2.191
R_GDP/capita	1169	8.00000000000 01	71388.7596796 248500	31605.4118957 10404000	438.659429629 003800	14998.0475159 82062000
mahadistance	1166	.0000	38.1098	4.074280	.2401333	8.1997714

## 4.4 Mixed Model Regression

Two models were found to be the most relevant to this study since the variables could be compiled into these two models effectively.

# 4.4.1 Model 1: Demographic and Individual Level Variables

Findings from the model 1 regression analysis indicate that various demographic antecedents predict or influence the scores of BCIQ. The model summary shows positive (R Square (.052)) correlation between the observed and predicted values of age of

participants. Arguably, the result implies that the participants were of relevant age group to participate since they have knowledge about culture intelligence and BCIQ. The result shows that education, country visited, country lived in, gender, and fluent languages have significant correlation with BCIQ outcome. The F value in SPSS signifies the p-value, which is used in testing the null hypothesis with a prediction that all the model coefficients or correlations are 0. Table shows that all the model coefficients (F values) are greater than zero depicting that null hypothesis is rejected and alternative hypothesis is approved.

Table (see appendix 2) shows regression correlations of various institutional outcomes. It shows that BCIQ has positive correlations with all the demographic determinants tested. The significance was only revealed between BCIQ and determinants but not between determinants.

*Table 4: Model summary (Individual and Demographic variable)* 

	Model Summary														
Mode	R	R	Adjusted R Square	Std. Error of	Change Statistics										
1		Square		the Estimate	R Square	F Change	df	df2	Sig. F						
					Change		1		Change						
1	.228	.052	.051	5.8784908	.052	32.112	2	116 7	.000						

a. Predictors: (Constant), R\_UA (As Is), AGE

Type III Tests of Fixed Effects<sup>a</sup>

-31	TINOU EHOOLO			
Source	Numerator	Denominator df	F	Sig.
	gf.			
Intercept	1	1151	3285.703	.000
EDUCATION	5	1151.000	1.824	.105
COUNTRIES_VISITED	4	1151	11.519	.000
COUNTRIES_LIVED_IN	3	1151	8.202	.000
GENDER	2	1151	2.623	.073
FLUENT_LANGUAGES	4	1151	3.560	.007

a. Dependent Variable: BCIQ\_50\_SCORE

Estimates of Fixed Effects<sup>a</sup>

						95% Confide	ence Interval
Parameter	Estimate	Std. Error	df	t	Sig.	Lower Bound	Upper Bound
Intercept	101.065437	.735162	1151.000	137.474	.000	99.623029	102.507846
[EDUCATION=]	4.150889	2.364144	1151	1.756	.079	487625	8.789404
[EDUCATION=Post-Graduate Degree (e.g. Masters, Doctorate, LLD, MD)]	.948510	.377341	1151.000	2.514	.012	.208157	1.688862
[EDUCATION=Secondary (High) School Completed]	.053282	.653373	1151.000	.082	.935	-1.228654	1.335217
[EDUCATION=Some Post-Secondary (University/College/Polytechnic)]	.393341	.544945	1151	.722	.471	675856	1.462537
[EDUCATION=Some Secondary (High) School]	1.288557	5.683222	1151.000	.227	.821	-9.862078	12.439193
[COUNTRIES_VISITED=]	-5.794427	5.688920	1151	-1.019	.309	-16.956242	5.367389
[COUNTRIES_VISITED=None]	-1.626508	.601877	1151.000	-2.702	.007	-2.807407	445610
[COUNTRIES_VISITED=One to two different countries]	-1.625620	.445553	1151.000	-3.649	.000	-2.499807	751432
[COUNTRIES_VISITED=Over five different countries]	1.329414	.468216	1151.000	2.839	.005	.410763	2.248066
[COUNTRIES_LIVED_IN=None]	-3.050816	.657114	1151.000	-4.643	.000	-4.340091	-1.761541
[COUNTRIES_LIVED_IN=One to two different countries]	-2.327645	.599267	1151.000	-3.884	.000	-3.503423	-1.151868
[COUNTRIES_LIVED_IN=Over five different countries]	.927488	1.607459	1151.000	.577	.564	-2.226391	4.081367
[GENDER=]	-1.265565	1.834386	1151.000	690	.490	-4.864680	2.333551
[GENDER=Female]	.710355	.336740	1151.000	2.110	.035	.049663	1.371047
[FLUENT_LANGUAGES=]	1.803682	2.572460	1151	.701	.483	-3.243553	6.850918
[FLUENT_LANGUAGES=None]	147525	.591709	1151.000	249	.803	-1.308475	1.013425
[FLUENT_LANGUAGES=One]	.024351	.394608	1151	.062	.951	749881	.798583
[FLUENT_LANGUAGES=Three or more]	2.042521	.605469	1151.000	3.373	.001	.854575	3.230467

a. Dependent Variable: BCIQ\_50\_SCORE.

## 4.4.2 Model 2: Country Level Variables and Distance Variables

Table 5 presents fixed effects of selected country levels variables as measured to BCIQ predicaments. The results show positive significance between autocracies (type of leadership), polity, democracy, GDP, and Eculedian cultural distance with BCIQ score. A polity is a form of political entity involving a people guided or united by a cohesive force of identity that assists to institutionalize operations. For a country, polity could be a measure of political stability; therefore, the outcome implies that political stability of a country has direct effect on BCIQ outcomes. Positive democracy results implies that the level of democracy of a country has direct implication on BCIQ, for example, the higher the democracy the higher the BCIQ scores and vice versa. Significant GPD result shows that a significant factor of business CQ concerning countries lived in is eminent when considering CQ of international businesses. Concisely, the findings imply that countries' cultures influence international business due to different BCIQ aspects. The data shows the variables that were entered into BCIQ score to assess their coefficient and significance. It is important to note that there are determinants with negative correlations and they need further investigations to understand their implications.

Table 5 shows that all the model coefficients (F values) for GDP, Polity, Eucledian cultural distance are >0 denoting that null hypothesis is discarded and alternative hypothesis is accepted.

Table 5: Fixed effect of country level and distance variable

### **Fixed Effects**

Type III Tests of Fixed Effects<sup>a</sup>

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	1149.000	24155.404	.000
R_democ	2	1149.000	11.089	.000
R_autoc	1	1149	.088	.767
R_democ * R_autoc	0			

a. Dependent Variable: BCIQ\_50\_SCORE

Estimates of Fixed Effects<sup>a</sup>

- 1							95% Confide	ence Interval		
-	Parameter	Estimate	Std. Error	df	t	Sig.	Lower Bound	Upper Bound		
- 1	Intercept	99.908879	.220121	1149.000	453.883	.000	99.476996	100.340762		
	[R_democ=0]	-1.650776	.618913	1149.000	-2.667	.008	-2.865103	436450		
	[R_democ=4]	4.378946	2.117051	1149	2.068	.039	.225226	8.532666		
-	[R_democ=8]	.428428	.665235	1149.000	.644	.520	876784	1.733639		
-	[R_democ=9]	-2.093199	.464492	1149.000	-4.506	.000	-3.004548	-1.181851		
-	[R_autoc=4]	.689340	2.324092	1149	.297	.767	-3.870600	5.249280		

a. Dependent Variable: BCIQ 50 SCORE.

Type III Tests of Fixed Effects<sup>a</sup>

	Source	Numerator df	Denominator df	F	Sig.
	Intercept	1	965.000	22278.315	.000
	R_polity	0			
١	eucledianculturaldistance	107	965	1.558	.000
	R_GDPcapita	41	965	1.342	.076
	R_polity * R_GDPcapita	0			
	eucledianculturaldistance * R_polity * R_GDPcapita	49	965.000	1.039	.402

a. Dependent Variable: BCIQ\_50\_SCORE.

# 4.5 The Scatter plots

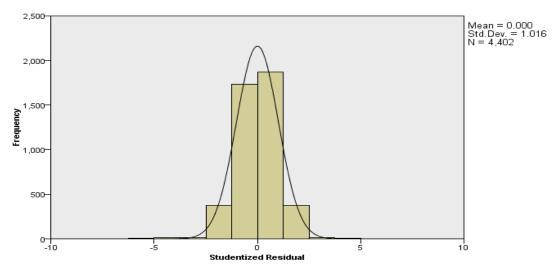
Figure 7 shows the scatterplot that exhibits the standardized predicted values and the standardized residuals of BCIQ scores. The fit line (Loess Curve) helps to detect nonlinearity. From the Loess curve, it seems that the correlation of standardized predicted to residuals is almost linear along the zero. It is reasonable to conclude that the correlation between the dependent variable and predictors is zero and positive because the residuals are randomly scattered along the zero mark. Interpretably, the chart shows that various country determinant have direct influence on BCIQ and foreign business.

# Dependent Variable: BCIQ\_50\_SCORE | Particular | Particu

Figure 7: Scatter plot chart

Figure 8 shows a residual output involving BCIQ with a closer distribution meaning CQ influences countries on different but close scales. The BCIQ factors influence how the countries succeed in business but they are also dependent on other factors.

Residuals
Target: BCIQ\_50\_SCORE



The histogram of Studentized residuals compares the distribution of the residuals to a normal distribution. The smooth line represents the normal distribution. The closer the frequencies of the residuals are to this line, the closer the distribution of the residuals is to the normal distribution.

Figure 8: Residuals Graphs

### 5 Discussions

# 5.1 Hypothesis

The hypotheses that were tested in this study were 1) More globalize countries have higher BCIQ, 2) Democracy increases BCIQ, and 3) Higher GDP has higher BCIQ. The findings have shown that the U.S. (see appendix 1), a most developed, globalize and with higher GDP scored higher BCIQ mean than others while less democratic nation like Japan scored least. On the other hand, Table 4 and 5 show that all the model coefficients (F values) are greater than zero depicting that null hypothesis is rejected and alternative hypothesis is approved. Since there is proof that alternative hypothesis of the study is approved, it is accurate to say that the hypothesis did conform because there are various country determinants affecting BCIQ. The study has shown that globalized, Higher GDP and democratic countries have higher BCIQ than emerging countries.

# 5.2 Theory vs. result

The correlation findings are essentials for establishing the relationship between various variables and determining the connections. The findings corroborate literature review or theory explanations; therefore, it is relevant to interpret that the finding is reliable and valid since any future research has a high likelihood to produce similar findings. The primary data shows a linear trend (Figure 7) to confirm the finding. The findings show that countries with higher GDP have higher BCIQ. The correlation of the primary findings shows that countries- lived-in influence the relationship between BCIQ and GDP in either a positive or a negative manner. Theory supports this relationship with an explanation concerning the culture of different nations. Alesina and Giuliano (2015) discovered that collectivism and individualism cultures of different countries affect the business quotients differently. Konara and Shirodkar (2017) discovered that institutionally distant IBs prefer full-ownership approach when their home countries are institutionally oriented compared to host countries. On the other hand, they prefer a jointownership business approach if the home country has weaker institutions than the host nation. It is evident that institutional distance and culture affect the BCIQ and GDP relationships for international businesses. Developing economy countries are hugely influenced by economies due to the government obligatory policies and controls. They face strict regulative policies for FDI thus affecting the level of IB.

Democracy has been shown to increase BCIQ. Table 4 revealed a significant relationship with a linear relationship between GDP and BCIQ or CI. Similarly, Figure 8 reveals an upward trend of the values of BCIQ depicting that higher GDP has higher BCIQ. Most of the developed countries embrace democracy more than emerging nations. The theory that supports this finding is the association between democracy and BCIQ. According to Gorodnichenko and Roland (2013) findings, countries with individualistic (UK and US) are less likely to solve collective constraints but adopt democracy more than collectivist countries. There is a strong fundamental link between individualistic cultures to widespread polity outcome and guideline of other democracy factors. Table 3 shows the primary findings period does determine the political stability of a country but culture does.

The three factors of BCIQ, F2-COMM, F3- PREP, F-6 -KNOW, are found to be the key transformational agents linked with institutional distance and culture for international business success. Business executives and students acknowledged these three trends as essential. Thomas et al. (2008) support these findings when they state that the CQ as an instrument of connecting skills and knowledge is a key factor for business success. The connection by instructive meta-cognition allows individuals to become adapted, establish, and transforms the cultural aspects of the environment. The skill requires the harnessing of adaptive knowledge to be successful in effective intercultural environments (Thomas et al., 2008). The greater the individual's CQ, the more likely to control culturally diverse settings. Institutions as a rule of the game are a key determinate factor when analyzing countries specific determinant affecting BCIQ because different countries have different institutional rules.

# 5.3 Theory implications

Theory implications are that there are various factors determining or effecting BCIQ and they may not be conclusively investigated based on country-specific or environment determinant. The autocracy relates to type of governance; therefore, it is reasonable to say that country's governance has direct implication on BCIQ and business outcome. The theory implication of the study is that it was the measure of reliability and validity of the study. The BCIQ scores or findings are corroborated with literature review findings that tested the theory to assess the validity and reliability of the study.

### **5.4** Future Research

It is important to note that there are determinants with negative correlations and they need further investigations to understand their implications. Future research should concentrate on a few countries and investigate specific countries' determinants. The current study has highlighted various determinants that could not be tested in an exhaustive manner but the findings are reliable since primary and secondary result corroborate.

# 5.5 Study Benefit

The managers or multinational employee or students benefit from the results since they get to understand the significance and use of BCIQ measures. The results or implications

of the training program are to help learners acquire more knowledge about institutional distance, CQ, and influence of culture to international business.

### 6 References

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review*, *91*, 1369-1401.
- Acemoglu, D., Johnson, S., Robinson, J. & Yared, P. (2008). Income and democracy. *American Economic Review*, 98, 808-842.
- Alesina, A. & Giuliano, P. (2015). Culture and institutions. *Journal of Economic Literature* 53 (4), 898–944.
- Almond, G. & Verba, S. (1963). The civic culture. Political attitude and democracy in five nations, *Sage Publications New York*.
- Alon, I., Boulanger, M., Elston, J. A., Galanaki, E., de Ibarreta, C. M., Meyers, J., Muñiz-Ferrer, M., & Vélez-Calle, A. (2016). Business cultural intelligence quotient: A five-country study. *Thunderbird International Business Review* 60(3), 237-250.
- Alon, I., Boulanger, M., Meyers, J., & Taras, V. (2016). The development and validation of the business cultural intelligence quotient. *Cross Cultural & Strategic Management*, 23(1), 78-100.
- Ang, S., Van Dyne, L., Koh, C., Ng, K.Y., Templer, K.J., Tay, C. and Chandrasekar, N.A. (2007). Cultural intelligence: its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance.

  \*Management and Organization Review, 3(3), 335-371.
- Barma, N. (2012). Rents to riches? The political economy of natural resource-led development. Washington, D.C: World Bank.
- Barzel, Y. (2002). A theory of the state: economic rights, legal rights, and the scope of the state. Cambridge University Press, Cambridge.
- Alon, I., Boulanger, M., (n.d.). *Business cultural intelligence quotient (BCIQ) instructions*. Retrieved from

  https://bannerweb.rollins.edu/prod/owa/pkg\_bciq.p\_login

- Chao, M. C. H., & Kumar, V. (2010). The impact of institutional distance on the international diversity–performance relationship. *Journal of World Business*, 45(1), 93-103.
- Coase, R. (1937). The nature of the firm. *Economica* 4, 386–405.
- Dongen, H. P. A. V., Olofsen, E., Dinges, D. F., & Maislin, G., (2004). Mixed-model regression analysis and dealing with interindividual differences. *Methods in Enzymology*, 384, 139-171.
- Du, Y. (2009). Institutional distance and location choice of multinational enterprises.
   Dissertations and Theses Collection (Open Access): Institutional Knowledge at Singapore Management University, 1-39.
- Gorodnichenko, Y. & Roland, G. (2013). *Culture, institutions, and democratization*. UC Berkeley, mimeo.
- Greif, A. (1994). Cultural beliefs and the organization of society: A historical and theoretical reflection on collectivist and individualist societies. *The Journal of Political Economy*, 102(5), 912-950.
- Greif, A., & Kingston, C. (2011). Institutions: Rules or equilibria? *Springer-Verlag Berlin Heidelberg*, 13-43.
- Griffin, K. (2003). Economic globalization and institutions of global governance. *Journal Recommendation Service*, *34*(5), 789-808.
- Hart, O. (1995) *Firms, contracts, and financial structure*. Oxford University Press, Oxford.
- Healey, J. F. (2013). *The essentials of statistics: A tool for social research*. Belmont, CA: Wadsworth Cengage Learning.
- Helpman, E. (2004), "*The Mystery of Economic Growth*", Cambridge, MA: Belknap Press of Harvard University Press.
- Johnson, T., Kulesa, P., Cho, Y. I., & Shavitt, S. (2005). The relationship between culture and response styles: Evidence from 19 countries. *Journal of Cross-Cultural Psychology*, *36*, 264-277.

- Konara, P., & Shirodkar, V. (2017). The direction of regulatory institutional distance and MNE's subsidiary ownership strategy: re-examining theory and evidence in the case of emerging markets, in Alain Verbeke, Jonas Puck, Rob van Tulder (ed.) *Distance in international business: concept, cost and value* (Progress in International Business Research, Volume 12) Emerald Publishing Limited, pp.135 154.
- Lipset, S. M., (1959). Some social requisites of democracy: Economic development and political legitimacy. *American Political Science Review*, *53*, 69-105.
- Livermore, D. A. (2009). Cultural intelligence: Improving your CQ to engage our multicultural world youth, family, and culture. Grand Rapids, MI: Baker Academic.
- Marshall, M. G., Gurr, T. R., & Jaggers, K. (2018). POLITY<sup>TM</sup> IV PROJECT: Political regime characteristics and transitions, 1800-2017, Dataset users' manual. *Polity IV dataset version 2017 <p4v2017 and p4v2017d>*, 1-82.
- Möller, J. & Eisend, M. (2010). A global investigation into the cultural and individual antecedents of banner advertising effectiveness. *Journal of International Marketing* 18(2), 80-98.
- Moua, M. N. (2010). Culturally intelligent leadership: Leading through intercultural interactions. New York, N.Y. (222 East 46th Street, New York, NY 10017): Business Expert Press.
- Mudambi, R. & Kiyak, T. (2015). *Global networks: Organizations and people*. Proceedings of the 57th Annual Meeting of the Academy of International Business.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- Parziale, L., & IBM Corporation. (2016). *Enabling real-time analytics on IBM z Systems platform*. Poughkeepsie, NY: IBM Corporation, International Technical Support Organization.

- Schofield, N., & Caballero, M. G. (2011). *Political economy of institutions, democracy, and voting*. Berlin: Springer.
- Scott, W. R. (2001). *Institutions and organizations* (2nd ed.). Thousand Oaks, CA: Sage.
- Stanko, T. L. & Gibson, C. B. (2009). The role of cultural elements in virtual teams. In Bhagat, R.S. and Steers, R.M. (Eds), *Cambridge handbook of culture*, *organizations, and work*, Cambridge University Press, Cambridge, pp. 272-304.
- Tabellini, G. (2005). Culture and institutions: Economic development in the regions of Europe. *CESIFO working paper no.* 1492, 1-78.
- Thomas, D.C., Elron, E., Stahl, G., Ekelund, B.Z., Ravlin, E.C., Cerdin, J.-L., Poelmans,
  S., Brislin, R. & Pekerti, A. (2008). Cultural intelligence: domain and assessment.
  International Journal of Cross Cultural Management, 8(2), 123-143.
- Velez-Calle, A., Roman-Calderon, J. P., & Robledo-Ardila, C. (2018). The cross-country measurement invariance of the Business Cultural Intelligence Quotient (BCIQ). *International Journal of Cross Cultural Management 18*(5),
- Wegner, T. (2007). *Applied business statistics: Methods and Excel-based applications*. Cape Town: Juta.
- Xu, D., & Shenkar, O. (2002). Institutional distance and the multinational enterprise. *The Academy of Management Review* 27(4), 608.

# **Abbreviation**

BCIQ Business Cultural Intelligence Quotient

CQ Cultural Intelligence

GDP Gross Domestic Product

ICC Intra Class Correlation Coefficient

PPP Purchasing Power Parity

USA United States of America

SD Standard Deviation

IB International Business

# Appendices

# Appendix 1: six components of BCIQ score by birth country

	E1 MO	TI: Motivati	ion	_	OMM: Adap		Preparat	REP: Cognit ion and Le Behavior		_	: Active Lis			VAR: Cogr	nitive	F6_KNOW: Global Knowledge			BCIQ_50_SCORE		
Country By Birth	Mean Mean	Standard Deviation	Total N	Mean	Standard Deviation	Total N	Mean	Standard Deviation	Total N	Mean	Standard Deviation	Total N	Mean	Standard Deviation	Total N	Mean	Standard Deviation	Total N	Mean	Standard Deviation	Total N
Albania	97.5221	13.1605	3	90.6670	7.7833	3	98.3635	5.8014	3	98.7313	16.0344	3	107.4137	10.3147	3	99.6940	13.1083	3	98.7319	1.1527	3
Argentina	99.4678	3.5745	5	98.7556	6.4731	5	95.7322	3.9225	5	96.0864	8.8716	5	97.7866	8.5611	5	97.2056	13.1966	5	97.5057	5.2521	5
Australia	99.7596	6.1293	20	103.0246	7.1610	20	101.7622	7.9052	20	97.8717	5.8246	20	104.8350	6.7739	20	113.8155	9.3393	20	103.5115	4.1137	20
Austria	99.9542	7.1963	24	99.5607	8.3408	24	100.8303	7.2671	24	92.9454	8.4349	24	103.2591	7.0228	24	106.6925	8.1612	24	100.5404	4.4496	24
Bolivia	105.3049		1	101.9012		1	100.5562		1	92.1189		1	97.0990		1	100.9382		1	99.6531		1
Brazil	99.7825	7.0428	51	98.5970	8.4231	51	101.1152	7.6191	51	96.0864	9.5550	51	102.5597	7.5696	51	104.9635	9.1381	51	100.5174	4.9822	51
Canada	100.0797	6.8836	31	99.2919	6.8174	31	101.9001	8.5615	31	96.5983	8.6160	31	101.2027	8.8070	31	110.5706	12.8498	31	101.6072	5.8325	31
China	92.3465	9.6808	125	98.7736	7.7932	125	99.3108	9.1362	125	94.4676	8.9015	125	99.7671	7.2525	125	104.2527	9.5658	125	98.1530	6.2499	125
Colombia	97.5221	.8425	3	100.4033	3.4321	3	102.0180	6.3298	3	97.4089	2.2906	3	98.2450	9.9253	3	108.4033	9.8754	3	100.6667	4.3511	3
Denmark	106.7642	4.1275	2	98.5309	17.4763	2	101.6526	7.7524	2	96.0864	5.6108	2	112.5710	2.4312	2	108.4033	10.5572	2	104.0014	3.6631	2
France	98.1427	7.6755	87	96.1162	8.3059	87	101.1863	7.6465	87	94.2622	8.7428	87	99.5887	7.5744	87	103.0833	10.1286	87	98.7299	5.6540	87
Germany	100.1590	7.4854	133	96.6642	8.9092	133	99.9297	7.9911	133	92.8348	8.4845	133	101.9590	6.8781	133	108.8242	9.6336	133	100.0618	5.2237	133
Greece	95.2226	7.8397	55	95.4058	8.1663	55	99.4798	8.0164	55	95.8700	7.2201	55	100.4747	8.3564	55	100.3952	9.7285	55	97.8080	4.5169	55
Hungary	98.0085		1	95.1607		1	98.3635		1	96.0864		1	103.9754		1	89.7405		1	96.8892		1
India	96.3745	9.5164	167	97.0442	9.9242	167	98.7705	9.7280	167	93.4493	11.3779	167	100.5372	8.5478	167	101.2734	10.1257	167	97.9082	7.0851	167
Indonesia	92.5362	11.2968	8	93.7564	8.3152	8	94.8003	11.7170	8	89.6392	10.5903	8	98.8181	6.0953	8	105.6039	9.7231	8	95.8590	7.1519	8
Ireland	98.9371	7.6183	11	101.6969	5.8981	11	101.9516	7.6131	11	97.8898	5.1313	11	100.8498	7.2862	11	105.6887	8.3614	11	101.1690	4.4072	11
Italy	98.1633	7.6370	66	95.5351	7.2841	66	100.2572	7.1327	66	94.5835	8.7690	66	100.9019	7.6079	66	102.8044	9.6059	66	98.7076	4.7682	66
Japan	95.0900	4.1275	2	89.5436	1.5887	2	95.0744	7.7524	2	80.2165	11.2217	2	88.5034	2.4312	2	104.6708	5.2786	2	92.1831	3.6405	2
Kazakhstan	102.8728	6.8962	3	98.1564	15.7812	3	105.6726	6.6989	3	101.3763	11.4531	3	108.5597	8.6527	3	100.9381	9.8754	3	102.9293	8.2276	3
Korea, South	95.0900	6.1912	2	103.0246	4.7663	2	97.2672	10.8535	2	96.0864	0.0000	2	91.9417	7.2936	2	108.4033	5.2786	2	98.6355	5.7305	2
Mexico	101.7783	7.3664	48	101.6203	8.9829	48	101.3328	8.6829	48	97.8221	10.7929	48	101.5400	8.5687	48	99.4607	10.6618	48	100.5924	6.2230	48
Morocco	105.5968	5.5949	5	105.0467	9.7420	5	100.1177	9.6081	5	95.2929	4.3462	5	108.7890	8.9658	5	106.1637	6.7805	5	103.5011	5.2412	5
Netherlands	97.7167	7.0111	25	96.4189	8.7280	25	100.1177	9.5997	25	90.3732	8.7285	25	100.5372	7.8152	25	105.8651	7.1245	25	98.5048	5.3830	25
Nigeria	95.0900	7.0741	5	92.4645	11.8253	5	94.4166	7.6589	5	88.1514	14.5774	5	92.2855	5.2143	5	100.1917	7.1797	5	93.7666	5.9321	5
Philippines	98.0085	5.8371	3	106.3948	8.9874	3	104.9417	7.5958	3	100.0538	11.9025	3	95.9529	13.0169	3	103.4265	11.4032	3	101.4631	8.8690	3
Poland	96.6303	7.4158	36	95.0358	9.9173	36	100.1908	9.0409	36	92.4495	10.9530	36	99.6777	9.2759	36	103.6339	11.5170	36	97.9363	6.8895	36
Portugal	105.3049	4.2545	5	100.5531	8.0385	5	102.7489	9.9280	5	94.4994	13.0385	5	107.4137	7.2936	5	110.6428	5.6607	5	103.5271	6.0925	5
Russia	101.6567	5.7883	16	103.1650	7.7385	16	103.5712	6.2470	16	101.0457	9.2196	16	103.9754	8.4219	16	115.4018	9.3314	16	104.8026	3.5953	16
Singapore	92.1714	7.8132	4	97.9692	4.9820	4	92.3335	10.3431	4	90.1351	9.4445	4	100.5372	10.8726	4	110.2696	6.4650	4	97.2360	6.8243	4
Spain	99.8359	8.1688	111	97.9338	8.4339	111	100.8723	7.4965	111	94.5852	9.6303	111	100.5062	7.4970	111	105.4441	10.9242	111	99.8629	5.7190	111
Sw eden	95.8196	8.9561	4	94.0373	7.6744	4	104.3935	5.7668	4	89.1433	10.4343	4	97.9586	7.6238	4	100.0050	8.2764	4	96.8929	2.8712	4
Taiw an	108.2234		1	101.9012		1	102.7490		1	88.1514		1	110.8519		1	108.4033		1	103.3800		1
Thailand	91.1986	8.5506	3	92.9138	9.7937	3	98.3635	10.9637	3	94.7639	11.4531	3	98.2450	7.1572	3	99.6940	5.7016	3	95.8631	7.5645	3
Turkey	103.0248	9.9255	16	100.3565	10.6567	16	104.9417	10.4087	16	96.8303	10.6674	16	104.4052	7.0881	16	109.1031	9.1651	16	103.1103	6.9013	16
United Kingdom	98.4575	8.4103	65	99.0321	8.7607	65	99.1056	8.3341	65	94.9266	9.2707	65	100.6959	8.9417	65	105.4747	8.9136	65	99.6154	6.0158	65
United States of America	102.4558	6.9446	21	102.9711	8.5444	21	106.1947	9.4203	21	100.6206	8.5357	21	108.7235	7.6477	21	113.5578	11.5936	21	105.7539	5.6231	21
Venezuela	106.0346	9.2868	2	99.6543	9.5325	2	96.1708	21.7069	2	98.0701	8.4163	2	110.8519	9.7248	2	102.8045	2.6393	2	102.2644	9.3380	2

Appendix 2: Correlation of six components of BCIQ, country, demographic variables

Variables		F1_motivation	F2_Adaptiv e Communicat ion Behavior	F3_Cognitiv e Preparation and Learning Behavior	F4_Active Listening and Perceptual Sensitivity	F5_Cognitiv e Aw arenes	F6_Global Know ledge	birth_countr y_same_n	countries_li ved_n	BCIQ_50_S CORE	Gender	Education
F1_Motivati on	Correlation Coefficient	1.000	.481**	.565**	.452**	.330**	.147**	.029	.238**	.718 <sup>**</sup>	110 <sup>**</sup>	108 <sup>**</sup>
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.315	.000	.000	.000	.000
	N	1170	1170	1170	1170	1170	1170	1166	1170	1170	1161	1164
F2_Adaptiv e	Correlation Coefficient	.481**	1.000	.467**	.557**	.302**	.167**	.013	.160**	.728**	064 <sup>*</sup>	.077**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.667	.000	.000	.030	.009
ion Behavior	N	1170	1170	1170	1170	1170	1170	1166	1170	1170	1161	1164
F3_Cognitiv e	Correlation Coefficient	.565**	.467**	1.000	.490 <sup>**</sup>	.374**	.186**	.009	.147**	.756**	108 <sup>**</sup>	.006
Preparation and	Sig. (2-tailed)	.000	.000		.000	.000	.000	.747	.000	.000	.000	.829
Learning	N	1170	1170	1170	1170	1170	1170	1166	1170	1170	1161	1164
F4_Active Listening	Correlation Coefficient	.452**	.557**	.490 <sup>**</sup>	1.000	.236**	.100**	002	.079**	.700**	076 <sup>**</sup>	.035
and Perceptual	Sig. (2-tailed)	.000	.000	.000		.000	.001	.950	.007	.000	.009	.238
Sensitivity	N	1170	1170	1170	1170	1170	1170	1166	1170	1170	1161	1164
F5_Cognitiv e	Correlation Coefficient	.330**	.302**	.374**	.236**	1.000	.226**	005	.157**	.580 <sup>**</sup>	.195**	.115**
Aw arenes	Sig. (2-tailed)	.000	.000	.000	.000		.000	.874	.000	.000	.000	.000
	N	1170	1170	1170	1170	1170	1170	1166	1170	1170	1161	1164
F6_Global Know ledge	Correlation Coefficient	.147**	.167**	.186**	.100**	.226**	1.000	.050	.204**	.479**	.036	.182**
	Sig. (2-tailed)	.000	.000	.000	.001	.000		.091	.000	.000	.226	.000
	N	1170	1170	1170	1170	1170	1170	1166	1170	1170	1161	1164
birth_countr y_same_n	Coefficient	.029	.013	.009	002	005	.050	1.000	.163**	.025	.031	031
	Sig. (2-tailed)	.315	.667	.747	.950	.874	.091		.000	.402	.285	.295
	N	1166	1166	1166	1166	1166	1166	1166	1166	1166	1157	1160
countries_li ved_n	Correlation Coefficient	.238**	.160 <sup>**</sup>	.147**	.079**	.157**	.204**	.163**	1.000	.249**	.042	.087**
	Sig. (2-tailed)	.000	.000	.000	.007	.000	.000	.000		.000	.151	.003
	N	1170	1170	1170	1170	1170	1170	1166	1170	1170	1161	1164
BCIQ_50_S CORE	Correlation Coefficient	.718 <sup>**</sup>	.728**	.756**	.700**	.580**	.479**	.025	.249**	1.000	040	.078**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.402	.000		.168	.007
	N	1170	1170	1170	1170	1170	1170	1166	1170	1170	1161	1164
Gender	Correlation Coefficient	110 <sup>**</sup>	064 <sup>*</sup>	108 <sup>**</sup>	076**	.195**	.036	.031	.042	040	1.000	.107**
	Sig. (2-tailed)	.000	.030	.000	.009	.000	.226	.285	.151	.168		.000
	N	1161	1161	1161	1161	1161	1161	1157	1161	1161	1161	1156
Education	Correlation Coefficient	108**	.077**	.006	.035	.115**	.182**	031	.087**	.078**	.107**	1.000
	Sig. (2-tailed)	.000	.009	.829	.238	.000	.000		.003	.007	.000	
	N	1164	1164	1164	1164	1164	1164	1160	1164	1164	1156	1164
		is significant a										
,	. Correlation i	is significant a	t the 0.05 le	vei (2-tailed)	-							

### **Reflection Note**

The thesis topic relates to technology, responsibility, and international themes because the study concentrated on globalization, institutional cultures, and political responsibility. Throughout the study, the researcher strove to close the research gap between institutions and culture by incorporating and critically analyzing the responsibility of institutional distance into the technological productivity of the nations. The thesis explored culture and institutions to establish determinants including the BCIQ factors. The technology aspects of the thesis were based on globalized country ideology and institutional aspects concerning the normative, cognitive, and regulatory aspects. The responsibility of institutions distance had been discovered that a direct consequence on BCIQ involving collective institutions. The main theme of the study was that country specific environmental factors in the BCIQ as an important aspect of organizations growth based on informal structures and other aspects. Furthermore, this thesis shows the implication and importance of capability to function efficiently in the cross-cultural environment for institutional and individual success. The variables tested were country level and individual level in connection to cultural aspects.

Multinational corporations and countries due to globalization trends consider cross-cultural factors. The units of analysis of the study were country and individual variables that are affected by globalization, political, social, democracy, and GDP perspectives both as local and international forces. The BCIQ is an online tool that has been popularized due to international factors and is a unit of analysis in this thesis. The greater the individual's CQ, the more likely to control culturally diverse settings. Institutions as a rule of the game are a key determinate factor when analyzing countries specific determinant affecting BCIQ because different countries have different institutional rules. Since there is proof that alternative hypothesis of the study is approved, it is accurate to say that the hypothesis did conform because there are various country determinants affecting BCIQ. The study has shown that globalized, Higher GDP and democratic countries have higher BCIQ than emerging countries.

BCIQ is a technology-oriented tool that links this study to innovation. Use of mixed-model regression technique is another link to innovation. Many studies have shown that

mixed-model regression strategy is a technique that helps researchers to analyze longitudinal data with large inter-individual variances. Cultural quotients are relevant to study with strengthen responsibility as a unit of analysis. Formal rules and norms are some of the determinant factors that differ based on religion, cultural orientation, and individual beliefs and perceptions. They are challenging to test, but using six BCIQ measures, the researcher of this paper made informed inferences and deductions from the findings.