

**ISTANBUL SABAHA TTIN ZAIM UNIVERSITY**  
**INSTITUTE OF SOCIAL SCIENCES**  
**FACULTY OF BUSINESS AND MANAGEMENT SCIENCES**  
**DEPARTMENT OF ISLAMIC ECONOMICS AND**  
**FINANCE**

**ISLAMIC CORPORATE GOVERNANCE AND**  
**SUSTAINABLE FINANCIAL PERFORMANCE: A**  
**PHENOMOLOGICAL STUDY**

**Ph.D. DISSERTATION**

**Waqar BADSHAH**

**Istanbul**

**July, 2020**

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**Prof. Dr. Mehmet Bulut**

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allowing me to grow with you. Thank you for dreaming with me and for allowing me to dream with you.

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## **ABSTRACT**

### **ISLAMIC CORPORATE GOVERNANCE AND SUSTAINABLE FINANCIAL PERFORMANCE: A PHENOMENOLOGICAL STUDY.**

Waqar Badshah

Ph.D. Dissertation, Islamic Economics, and International Finance

Supervisor: Prof. Dr. Mehmet Bulut

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This phenomenological study attempts to explain the relationship between Islamic Corporate Governance and sustainable financial performance of the firm. Islamic corporate governance refers to the mechanisms of governance framework embedded in the coating of Islamic law. The key objective of Islamic corporate governance is to strike a balance between individual gain and social development. The main constituents of Islamic corporate governance are: avoiding unnecessary risks and involvement in interest-based activities, distribution of wealth via donation/charity and developing a strict check and balance system under the supervision of Islamic regulatory authority functioning at an institutional or country level. The most important part of the Islamic corporate governance is to develop an efficient system of accountability which would negate the agency problem and conflict of interest between the investors, shareholders, and board of directors. The effective implementation of Islamic corporate governance increases the trust of the shareholders and other stakeholders which increases the market value of firm. This theory was put to test in this study by conducting the semi-structured interviews with the 50 executives of the firms that are either registered on Borsa Istanbul Index or are members of MUSİAD (Independent Industrialists and Businessmen Association) and participant Banks. The responses were recorded and analysed using qualitative techniques and thematic analysis was done by applying NVIVO. It was evident from the responses of executives that Islamic corporate governance contributes towards the sustainable financial health. ICG possess accountability edge over CCG which holds the corporations in good stead with respect to the operational and administrative efficiency. Moreover, ICG through its due delegation of authority approach helps in reducing

the agency cost. Hence, SOPs formulated under the umbrella of ICG ensures the effective and efficient monitoring, controlling and supervision of the organizational structures.

**Keywords:** Islamic Corporate Governance, Sustainability, Financial Performance, Conventional Corporate Governance, Qualitative Method.

**JEL Classifications:** G30, M14, Q01, G18, G20

## ÖZET

### İSLAMI KURUMSAL YÖNETİMİ VE SÜRDÜRÜLEBİLİR FİNANSAL PERFORMANSI: FENOMENOLOJİK BİR ÇALIŞMA.

Waqar Badshah

Doktora Tezi, İslamik Ekonomi ve Uluslararası Finans

Tez Danışmanı: Prof. Dr. Mehmet Bulut

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Bu fenomenolojik çalışma, İslami Kurumsal Yönetim ile firmanın sürdürülebilir finansal performansı arasındaki ilişkiyi açıklamaya çalışmaktadır. İslami kurumsal yönetişim, İslam hukukunun kapsamında yerleşik olan yönetişim çerçevesi mekanizmalarını ifade eder. İslami kurumsal yönetişimin temel amacı, bireysel kazanç ve sosyal kalkınma arasında bir denge kurmaktır. İslami kurumsal yönetişimin temel bileşenleri şunlardır: gereksiz risklerden ve faiz temelli faaliyetlere katılımdan kaçınmak, servetin bağış / yardım yoluyla dağıtılması ve kurumsal veya ülke düzeyinde faaliyet gösteren İslami düzenleyici otoritenin gözetimi altında sıkı bir kontrol ve denge sistemi geliştirilmesi. İslami kurumsal yönetişimin en önemli kısmı, yatırımcılar, hissedarlar ve yönetim kurulu arasındaki kurum sorununu ve çıkar çatışmasını ortadan kaldıracak etkin bir hesap verebilirlik sistemi geliştirmektir. İslami kurumsal yönetişimin etkin bir şekilde uygulanması, hissedarların ve diğer paydaşların güvenini arttırmakta ve bu da firmanın piyasa değerini arttırmaktadır. Bu teori, bu çalışmada Borsa İstanbul Endeksinde kayıtlı olan veya MUSİAD (Bağımsız Sanayici ve İşadamları Derneği) ve katılımcı Bankalar üyesi 50 firmanın yarı yapılandırılmış görüşmeleri yapılarak test edilmiştir. Yanıtlar kalitatif teknikler kullanılarak kaydedilmiş ve analiz edilmiş ve tematik analiz NVIVO uygulanarak yapılmıştır. İslami kurumsal yönetişimin sürdürülebilir finansal sağlığa katkıda bulunduğu yöneticilerin verdiği tepkilerden

anlařılmaktadır. İKY, řirketlerin operasyonel ve idari verimlilik aısından iyi durumda olmasını saęlayan CCG'ye karřı hesap verebilirlik avantajına sahiptir. Ayrıca, İKY, yetki devri yetkisi yaklařımı yoluyla ajans maliyetinin azaltılmasına yardımcı olur. Bu nedenle, İKY atısı altında formüle edilen SOP'ler, organizasyon yapılarının etkili ve verimli bir řekilde izlenmesini, kontrol edilmesini ve denetlenmesini saęlar.

**Anahtar Kelimeler:** İslami Kurumsal Yönetim, Sürdürülebilirlik, Finansal Performans, Geleneksel Kurumsal Yönetim, Sayısal Yöntemler.

**JEL Sınıflandırması:** G30, M14, Q01, G18, G20

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## **LIST OF ABBREVIATIONS**

ICG.....	Islamic Corporate Governance
CCG.....	Conventional Corporate Governance
SSB.....	Shari’ah Supervisory Board
IFI.....	Islamic Financial Institution
IFSB.....	Islamic Financial Services Board.
AAOIFI .....	Accounting and Auditing Organization for  Islamic Financial Institutions
SAC.....	Shari’ah Advisory Council
CBMA.....	Central Bank of Malaysia Act (2009)
SGF .....	Shari’ah Governance Framework

## **CHAPTER 1**

### **INTRODUCTION:**

Corporate governance mainly refers to the standard set of practices and policies that ensure the fairness, accountability, and transparency in the relationship between corporation and its stakeholders. In broad terms corporate governance leads us to the set of mechanisms put in place in the organization to achieve the overall good governance of the corporations. The main pillars upon which these set of standards are constructed can be categorized as,

- 1- Transparency
- 2- Fairness
- 3- Responsibility and
- 4- Accountability

Transparency implies that financial statements are prepared according to the approved accounting standards which reflect the figures they are supposed to reflect in fairly and timely fashion. Transparency in the financial statements or in the genetic organizational structure of the organization is

considered an absolute necessity by the stakeholders who have invested their interest, time, money and trust in the hope of getting transparent reflection of the underlying economic events that companies register.

Similarly, the term fairness in the corporate governance refers to the fair policies of the organization without any bias to any of the stakeholders and employees. Good corporate governance structures tend to ensure the fairness by widening the diversity of the decision-making group generally known as board of directors and try to increase the diversity in the workforce environment as well. Similarly, participation of women in the decision-making, workforce, human capital, and the structural organization is commonly considered as fair and unbiased.

Another fundamental aspect of good corporate governance formulation is to ensure the sense of responsibility among the policymakers and the same sense of responsibility among the task force which is required in order to implement the fair transparent organizational policies and corporate structure within the organization. It is widely believed that no firm can achieve or claim to have good corporate governance practices without any sense of responsibility.

The 4th pillar of the corporate governance is the accountability. It means that higher management is accountable for the formation of policies that ensure the

effective and efficient governance structure within the organization. If their constructed policies are not able to achieve the desired results then they will be held accountable for their failure to devise such comprehensive plans that were supposed to ensure the financial transparency, organizational fairness, responsible implementation and the fear or threat of the accountability process. This generally involves the independent audit review and the independent audit Department which conducts the audit of the organizational and financial matters internally.

However, recently the spectrum of corporate governance is expanding through the conventional frameworks. The Islamic world and Islamic finance is getting popularity and attracting a huge part of the world population due to their different take on certain financial matters. Muslim countries and their predominantly Muslim population are accepting this alternative mode of finance and economic system. This resulted in the high growth, development, and demand of Islamic financial instruments. However, while embracing the shift of conventional finance into the Islamic finance the corporations also tried to change their governance mechanism in light with their offerings of an alternative financial economic system. This deliberate systematic change had an multi fold impact.

First, it helped to gain the trust of the people specially the Muslim population who were not comfortable with the conventional financial system as it contradicted with their principals, ideologies, and faith. Majority of the Muslim people consider the conventional economic system in direct contradiction and conflict with their faith. Governments and the organizations have sensed this gap and realized the potential of coming up with an alternative system which will be in line with the religious principles and ideologies of around two billion Muslim people in the world.

The surge in popularity of Islamic finance and financial instruments is the evidence of their approval. In many countries, Islamic finance has continuously continued its trend of upward growth and development. However, initially companies issuing Islamic financial instruments met with this skepticism and trust issues. People were reluctant to accept the fact there these financial instruments are completely in line with their Islamic ideology. They couldn't accept this fact that the conventional organizations who have their investments in different portfolios and many of their portfolios are interest based so how can they separate their interest based income with the non-interest based income while the governance mechanism of both of these branches is being governed by the same administration. This sentiment led to the increase in demand for the Islamic corporate governance where the relationship between the shareholders and other stakeholders

with the firm itself will be balanced under the core principles of Islam. This was taught necessity and accommodating for both the stake holders and the firm itself. Now, many organizations have all together a different set-up which looks after their Islamic investment portfolios While their conventional setup looks after their conventional side of business. From here on the term conventional will refer to all the activities that have been associated with the “interest”. Conventional setup also employs conventional corporate governance (hereafter CCG) practices whereas Islamic side of businesses generally tend to employ the Islamic corporate governance hereafter referred as ICG.

### **1.1. Research Aim and Objective.**

The key objective of the present study is to explain the overall relationship between Islamic Corporate Governance and the sustainability of the firm’s financial performance. The multifold purpose of this study can be summarised as follows,

- To understand the factors that constitutes Islamic Corporate Governance.
- To explain the difference between Islamic Corporate Governance and Conventional Corporate Governance
- To examine the existing ICG Models being applied in Firms

- To assess the implications of ICG towards achieving the sustainability of financial performance.

## **1.2. Research Question**

The primary research question for the current study is to explore as; what is the relationship between Islamic Corporate Governance and firm's sustainable financial performance?

- What are the factors that constitutes Islamic Corporate Governance?
- What different ICG models are being adapted by Firms?
- How ICG differs from conventional Corporate Governance?
- What is the significance of ICG towards achieving the sustainability of financial performance?

## **1.3. Thesis Statement**

The ICG and CCG differs on the basis of their fundamentals, while followers of both of the governance systems think that they are fighting for sustainable financial performance of the firm. However, the contrasting outcomes of both of the models may clearly define the distinction of ICG over CCG, as there are few comparative studies on the implication of both of the models. So, the main focus of this research is to explore the

optimistic effects of ICG over CCG that would be enough towards the selection of ICG over CCG in over-all mechanism, and this would be done on the basis of subjective approach.

#### **1.4. Significance of the Study**

This study helps us to understand the limitations of the conventional corporate governance system and allow us to infuse the advantages and effective implementation of Islamic corporate governance system. It also highlights the need of balancing the religious and spiritual act with the worldly financial matters.

#### **1.5. Scope of Research**

Majority of firms in Turkey believes that CCG system is more feasible than ICG, as CCG is an old system as compare to ICG. They also believe that CCG is less risky and reliable. Whereas this study has chosen to limit its scope to the top fifty firms in “Borsa Istanbul Stock Exchange, Independent Industrial Businessman Association (MUSAID) and participative Banks” but the results generated from the information through these firms may explain the over-all market to some extent, as the top fifty firms may consider to be as market leader for “Borsa Istanbul Stock Exchange”. Therefore, this research will

be helpful in promoting the ICG in the industrial and other sectors.

## **1.6. Structure of Thesis**

This research contains five parts. The first part highlights the direction of entire study, which includes the background of study, statement of problem, objectives, research questions, significance, and scope of the study. Part 2 confers the theoretic details of ICG and CCG and their benefits in terms of their performances. This comprises the background of ICG and CCG, the fundamental principles of governance, the relationship among CG mechanism and firm's financial performance, provides a wide-ranging study of the theoretic context of ICG. It describes the beginning of ICG and analyse its agenda and models in the corporate sector. Part 3 initiates by explaining the methodological approach, philosophical perspective of research, and design of research. Part 4 will continue with the analysis of interviews sessions conducted with the CEOs or top financial experts of the firms in turn. Lastly, part 5 will close the study by summarizing the main results and provided that definite plan approvals in enhancing and enlightening the ICG mechanism. It will too highlight the limitations of study.

## **CHAPTER 2**

### **ISLAMIC CORPORATE GOVERNANCE FRAMEWORK**

Islam prohibits the unnecessary risk taking because it increases the chances of losing someone's wealth. That is why betting is considered Haram in Islam. Islam proposes the alternative economic system Which is based on fair allocation of resources among the various sections of society. It actually encourages the prevention of unnecessary risk taking (Saifullah & Shamsuddin, 2018).

This Islamic economic system depends on the social equality of its members. The social upbringing, development and the access to economic resources is the soul of its economic reform. Everyone who owns money up to a specific limit has to pay the tax, Islamic tax, known as zakah. This zakah is then distributed among the last privileged members. This allows the less fortunate society members to survive and share the success of more fortunate people of this society. Islam emphasizes a lot on zakah. Islam considers that Zakah one's wealth and gains. The most striking difference between Islamic and the

conventional financial system is that in the Islamic system, Islam strikes a balance between the material gains and the spiritual gains.

## **2.1. Epistemology of Islamic Corporate Governance:**

### **2.1.1. Logical conception of religion Islam:**

The word “Islam” is derived from the origin words of S L M. It epitomizes variety of connotations. Customarily, Islam typifies al-Din, submission, surrender, obedience as well as peace (Al-Faruqi 1982). This has manifested that a man can only attain true peace of physical and spiritual via full surrender, obedience, and submission to Allah the Almighty. This has been irrefutably mentioned by Allah in the Quran (13: 28-29). A man will become a Muslim once he has verbalized the “Shahadah”. “Shahadah” signifies there is no God except Allah and Muhammad (peace be upon him) is His prophet. A real Muslim will carry three essential elements namely “Iman” (faith), “amal” (action) as well as “ihsan” (Realization).

Worldview or underlying philosophy on the other hand, epitomizes how man perceives this world. According to Chapra (1992), “.....a set of implicit or explicit assumptions about the origin of the universe and the nature of human life”

Conventionally, every community or system is controlled or influenced by its own worldview. The different worldviews

among these communities or systems will eventually lead human beings to distinct end means of human life. Other aspects of life such as ultimate possession, cramped resources by virtue of human beings disposals, the relationship among men in term of rights and responsibilities, their surrounding environment as well as their interpretations of efficiency and equity will also be different (Chapra 1992).

On the other hand, according to Nauqib (1993), from the Islamic point of view, worldview is considered as vision of reality and truth (ru'yat al-Islam li al-wujud). He then further interprets the Islamic worldviews as “a metaphysical survey of visible as well as the invisible worlds including the perspective of life as a whole”

His conception of the Islamic worldview does not comprise of just materialistic or capital gains. Hence, as far as Islamic nature of reality (ontology) is concerned, Islamic worldviews concern with this universe (world) and the hereafter commonly referred as the “Day of Judgment”. These views are principally derived from the Holy Quran. The belief in dual worldviews has made Islam look exceptional and peculiar 27-(Izetbegovic 1984). The emphasizing is on logical reasoning as well as illumination of rationality. Due to this, Islam has distinguished itself from other available worldviews. For instance, the western ideology is considered as secular and liberal while

Christian ideology is more on a religious side also sometimes labelled as conservative.

Human being has been created by Allah with the purpose to rule this world as a Khilafah (vicegerent). As the best creature ever created, man has been equipped with remarkable qualities such as “aql” (mind), feeling (intuition) as well as the well balanced and beautifully crafted physical appearance. These virtues on the other hand, have enabled man to better reflect, understand and distinguish between good and bad. With all these advantages, man ought to worship Allah and not to interpret himself as autonomous. The ontology as far as the Quranic view is concerned, implies diversity. Thus, this has made Islamic concept of leadership different from other systems.

**Table 2.1: Implications of Different Worldviews on Man’s Way of Life**

<i>Types</i>	<i>Worldviews</i>	<i>Man’s Way of Life</i>
Western	Secularism	Separation between religion and other aspects of life, materialistic, individualistic, less socio economic justice
Christian	Religious	Less public relations, less concern with the worldly life
Islam	Dual worldviews: <ul style="list-style-type: none"> <li>• In this world</li> <li>• In the hereafter</li> </ul>	Maslahah of the ummah (public benefit), accountability, trustworthiness, transparency etc.

**2.1.2 Perpetual existence of Islam:**

Islam perceives world only as a transit for man to the perpetual life in the hereafter. Muslims believe that world is a place where they are accountable to other Allah’s creatures as well as to Allah Himself. These beliefs allow them to restraint their

instincts. Every man will be judged on the reckoning day for whatever deeds he or she has done during his or her life in this world. If good deeds are more than bad deeds, this will promise an everlasting place in Jannah (paradise) while hell is waiting for those who have chosen to defy Allah's command.

Allah has manifested His right way by means of the Prophets. The ultimate duty of these prophets with revelations was to transform humanity from a state of Jahiliya (Lost in the earthly life) to a true Muslim. Allah manifests in the noble Qur'an:

*"I have not created the jinn and ins (human beings) except to worship Me".*

Prophets such as Muhamad, Isa, Daud and Musa (PBUT) have received revelation from Allah in the form of scriptures. These prophets were inherently carried similar paramount messages from Allah which is to worship and obey all His commands. Although these Prophets carried similar ingrained commandments, the details were not identical. The differences were depending on the condition, nation as well as the Prophet who was in charge. Muhamad (PBUH) was the last Prophet to govern this world. He was very special in the eyes of Allah. This has been evidenced by Allah via Quran. Quran is the last scripture revealed by Allah and It will lead mankind till the day of reckoning. Quran is a complete scripture as compared to others which consists all-inclusive doctrine as well as some particulars on many dimensions of human life.

### **2.1.3. Conceptual Framework of ICG:**

The conceptual framework of ICG realize on the definitions and the laws specified in Islam. To understand the core of ICG, we need to understand the core principles and codes on which the Islam religion has been built.

Islam is the second biggest religion of the world after Christianity and has around 2 billion followers in almost all parts of the world. Islam relies on the notion of community, brotherhood, mutual understanding, and help. In Islam, we believe in one God “ALLAH”. We believe that there is no God but Allah and Hazrat Muhammad peace be upon him is the last and true Messenger of Allah. One has to believe and accept this notion by his words and in his heart as well, in order to be called as Muslim. In Islam, this concept is referred as “Tawheed”. To spread the message of Allah, 1,24,000 messengers were sent in this world. Hazrat Adam (A.S) was the first one and Hazrat Mohammed, peace be upon him, was the last one who came around 1400 years ago.

The five dimensions of corporate governance from Islamic perspective are as follows:

- Adl: (Justice)

It represents equilibrium and fairness in every aspect of the life like passing judgments, responsibilities toward others, protecting society members’ rights regardless of their religion,

sex, and nationalities. It's a comprehensive framework for the overall society including individuals and institutions which are considered as cornerstone for the development and implementation of Islamic values.

- Hisbah:

It is an Islamic system in which the state has the right to inspect all practices in the market to ensure fairness and equity. These procedures may be extended to deeply inspect minor crimes in the society. In this system the state recruit inspector or supervisor also called as Al-Mouhtasib.

- Self-consciousness/mindfulness (alertness):

Schieffer et al. (2008), stated that "Islam puts strong emphasis on the conscious recognition of the interdependence between the invisible and the visible, whereby the invisible is regarded as the cause of the visible (software leads hardware). Hence, Good Governance starts on the psychological level of the individual."



Figure 2.1. The Main dimensions of Islamic Corporate Governance

Source: Schieffer et al. (2008)

- Al Tawheed: unity

As per Islamic literature there are three levels of unity,

1-Urity of humanity,

2-Urity of the People of Book and Urity of Muslims. This concept should be applied on all parties within the organization.

### 3-Shura: Consultancy

One of the main concepts in Islam is Shura (consultancy). This means that the decision-making process should be done through consultancy and not based on dictatorial actions.

In fact, there neither exists a specific Arabic phrase that connotes the term 'corporate governance' nor a literature that could point to the exact origin of corporate governance in Islam. However, it is arguable that the concept of corporate governance is evident within the Sharia' legal principle of *Siyasa Al-Sharia'*, which refers to the act of governing the subject necessary to the community such as, inter alia, security, market regulation, taxes, and public security, in accordance with the Sharia' law. This principle conforms with several Quranic verses which stress the need for good governance and constructive collaboration between the authorities such as the state or a company, and the subjects such as the shareholders or other stakeholders, otherwise known as *Hisbah*.

As far as its relevancy to Islamic banking is concerned, *Hisbah* serves as an integral check-and-balance mechanism for the banking industry, especially in light of the paramount importance placed by the industry on Sharia' compliance in the IFIs' financial activities. In modern Islamic banking practices, the role of *Hisbah* is assumed by the Sharia' board, whose

duties include, inter alia, the supervision of the IFI's financial activities in ensuring their full compliance with the Sharia' law. Nonetheless, it is arguable that the responsibilities of a Mouhtasib do not suit a supervisory body such as the Sharia' board as in most circumstances, the Hisbah institution normally lies under the jurisdiction of the state rather than the IFIs. With the Mouhtasib being paid by the state, which also remains independent from any direct connection with the industry, this approach can prevent the Sharia' board members from behaving in a manner inconsistent with the spirit of the Sharia' law and the interests of the stakeholders.

## **2.2. Ideological Differences between ICG and CCG – Tawheed v. Secularism:**

Another important point of debate between Islamic corporate governance and conventional corporate governance is the difference in their ideologies. While the concept of Western corporate governance stemmed from socially derived 'secular humanist' values, Islamic corporate governance concept took its shape from the ethical principles that are rooted deep within the teachings of Islam – specifically the governance of human's inter-relationship with one another, and most importantly, with God, in every matter. Above all, the primary objective of Islamic corporate governance is to serve God and

uphold his commands in line with the injunctions of the Holy Quran and the Sunnah.

In principle, the Islamic corporate governance system differs from its Western counterpart in the sense that companies, IFIs, owe a duty to uphold the commandments of God before anything else. This is in contrast to the Western corporate governance concepts such as the Anglo-Saxon and the German models, which do not incorporate any religious sentiments or consciences within their respective corporate governance frameworks. However, this does not automatically imply that the Islamic corporate governance system neglects the interest of the company, shareholders, and the other stakeholders as Sharia' law also guarantees the protection of these groups' financial objectives. This is portrayed by a number of Islamic banking products such as the application of Mudarabah in current or savings account products, and the Islamic Negotiable Instrument of Deposit ('INID'), where the IFI as the Mudharib, is obliged to maximize the value of the shareholders' investments as long as it materializes within the permissible parameter of Fiqh Al-Muammalat (Islamic commercial law).

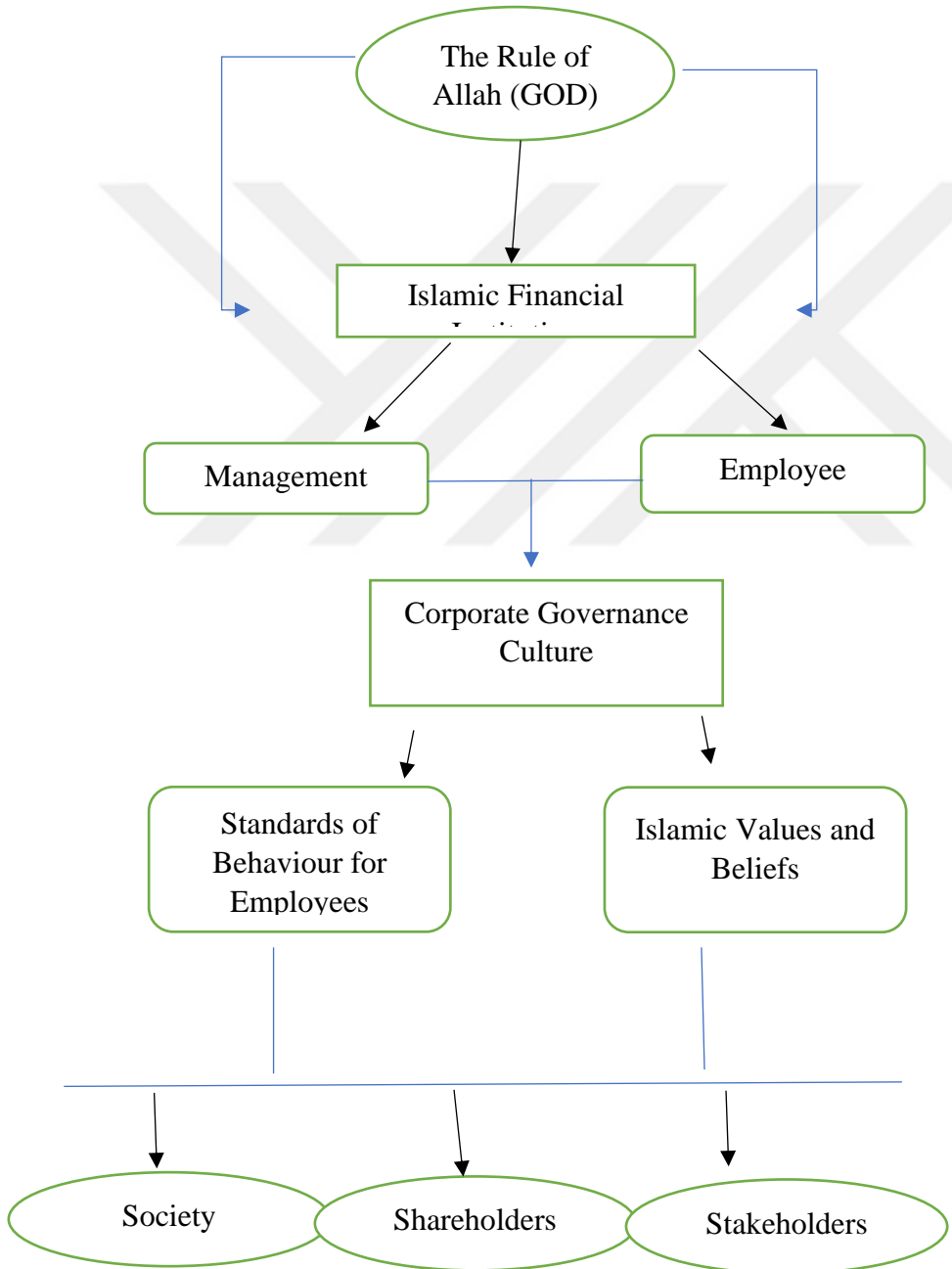


Figure 2.2: Tawheed as the Apex of Islamic Corporate Governance System

In the Islamic corporate governance system, the most important stakeholder of the Islamic financial industry is Islam itself. If industry players such as the IFIs fail to comply with the strict rules of Sharia' law, it is submitted that the concept of Islamic Finance or Islamic banking is merely an attempt by the financial institutions to exploit the image of Islam as a brilliant marketing scheme in order to profit from the 2 billion Muslim population worldwide. Since the 'Islamic' label of the IFI is undeniably influential in the Muslim communities, it remains subject to exploitation by the financial institutions as a strategic leveraging tool to settle a institution's position as an ideal Islamic financial institute within a particular community. This brings negative repercussions that not only can damage the credibility of the IFIs and the global Islamic banking market, but also the reputation of Islam as a whole. Hence, it is important to note that the Sharia' compliance element serves as a crucial ingredient of the Islamic corporate governance system in justifying the 'Islamic' prefix attached to the IFIs that further distinguishes Islamic banking from the Western banking system.

### **2.2.1 Core Principles of Islam relevant to Corporate Governance:**

Though the definition of Islamic corporate governance hasn't been defined, it generally refers to the practices, standard set

of mechanisms and the governing frame structure developed in light of Sharia. (Shibani & De Fuentes, 2017 Elaborates the idea of ICG by exclaiming that ICG is the governance system which is synchronized and guarantees the effective and sovereign agreement with the Islamic principles. For this purpose, Shariah supervisory board, hereafter SSB, is appointed to look after the overhaul of conventional governance system into the ICG.

The main task of SSB is to transform the conventional practices and their underlying impact according to the laws defined by the Islam (Safieddine, 2009). The major part of their job is to understand the strategies formulated by the top management and where necessary transform them into the Islamic mode and then oversee implementation of these strategies. Any launch of the new business product or transaction that falls under the banner of ICG has to be approved by the SSB and they make sure that these products are different from the conventional products and adhere to the well formulated, planned and thought decisions taken in light with the Islamic principles by the SSB Mollah & Zaman, 2015).

This added layer of protection has not been popular among many conventional financial institutions. Since any interest related investment under the framework of Islamic corporate governance is prohibited therefore it presents quite a bit of a

challenge in modern economy, especially in dealing with the conventional businesses around the world. This suspect of this

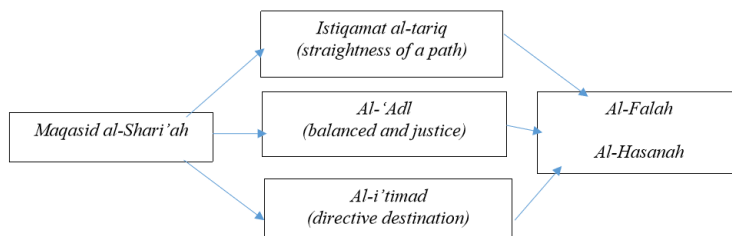


Figure 2.3: Dynamic Key elements of Maqasid al-Shariah

Source: Al-Kaylani (2009, p.53)

Islamic finance has been highlighted by the couple of researchers. Many studies like (Shleifer & Vishny, 1986; Stulz, 2005) found that Shariah limitations on portfolio divergence, interest based extensive activities and limiting the use of risky portfolios can make businesses prone to greater financial instability.

### **2.2.2 Conventional corporate governance approaches:**

The primary purpose of CCG was to cope with the agency problem and the moral hazards arising due to the conflict of interest mainly by the managers appointed on behalf of the shareholders by the shareholders. The true essence of the corporate governance practices put in place by the organizations to catch and eliminate any fraudulent activity or

corporate deception. With every passing accounting fraud, the emphasis on stronger, reliable and effective implementation of standard set of policies arose. This led to the transformation of the governance structure. Depending on the situation and the past experiences, various organizations adopt different mode of corporate governance regulations.

### **2.2.3 Islamic Corporate Governance:**

There is no formal agreed upon definition of Islamic corporate governance in the literature or in the regulations that govern it. The closest formal definition of the terminology of ICG is the explanation of Shariah governance system in the IFSB-10.

The IFSB-10 defines the Shari‘ah governance system as

“a set of institutional and organizational arrangements through which IFIs ensure that there is effective independent oversight of Shariah compliance over the issuance of relevant Shari‘ah pronouncements, dissemination of information and an internal Shariah compliance review” (IFSB, 2009a: 2).

Dissecting this explanation, we can understand that it covers three important factors.

1- The set of institutional and organizational arrangements:

This involves the setting up of standard set of procedures and practices across the organization which would ensure the transparent implementation of governance mechanisms.

Examples of such organizational arrangements could be development of internal audit Department or the appointment of Shari'ah supervisory board etc.

#### 2- Effective independent oversight of Shariah compliance:

The second step involves the unbiased and strict monitoring of the governance practices. The critical evaluation of applied procedures is necessary to eliminate any risk of agency problem and conflicts of interest by the various stakeholders.

#### 3- Shariah pronouncements, dissemination of information and an internal Shariah compliance review:

This step involves the critical evaluation of Shariah compliance at the various steps covering both ex ante and ex post aspect. This review is necessary to understand the implementation and aftereffects of Shariah compliance. It also helps to analyze the internal and external reaction of the market and the customers in response of the new launch off Islamic financial product. Thus, it focuses in fostering moderation and fairness in financial transactions (Wilson, 2009a: 61)

### **2.3. Capital Markets and Corporate Governance:**

Capital markets serve as the backbone of the modern financial system. Capital markets act as the medium of exchange for the investors and businesses to access and raise capital and

enhance the return on their portfolio and investments. It is also the source of managing and transferring risk arising via business transactions and investments that would be otherwise difficult to lay off. Governments along with the financial institutions and regulatory bodies work together to maintain the sustainable growth of the capital markets in order to avoid any systematic failure of the economic system (Ferris, Jagannathan & Pritchard 2003).

Capital markets represent the overall financial health of our country. The trillions of dollars invested in the develop capital markets by the various financial institutions, brokers, agents and shareholders need to be monitored and regulated through effective and efficient governance mechanism as it increases the trust of the investors in the market which is necessary for the sustainable development of capital markets (Rezaee 2009).

Islamic corporate governance also focuses on safeguarding the interest and investments of various investors and creditors. It ensures that all the policies designed under its framework must protect the investment of the shareholders. However, this protection of shareholders and investors' rights mechanisms are always supported with the relevant laws and regulations of Shari'ah. Islamic corporate governance teaches us that how to strike a balance with the spiritual and capital gains.

### **2.3.1 CG and Firm Value:**

Companies which are associated with the good corporate governance structures generally fare well in terms of their market value. Investors trust those companies which have good governance mechanisms put in place to reduce the agency cost, moral hazard and other trust issues. Strong corporate governance increases the trust of all the stakeholders which is reflected by the investors while valuing the security. This is because strong governance frameworks which ensure the reliability, responsibility and accountability protect the shareholders' rights and then subsequently reduce any conflict of interest which may arise due to any agency relationship (Balachandran & Williams, 2018). Another important aspect of improved corporate governance is the improvement in operational efficiency. This operational efficiency not only helps in bridging the gaps between the management and shareholders, but it also helps in restoring the confidence in the management by the investors. This confidence is reflected in the improved market value of firms. Klapper and Love (2004) investigated this hypothesis for the 14 developing countries and found evidence, on a global scale, that stronger corporate governance framework is strongly connected with the improved operational efficiency and higher market price of shares.

### **2.3.2 Agency Problem and the Corporate Governance:**

The conflict of interest between the management and these stakeholders is generally termed as the conflict of interest. In corporate finance, this conflict of interest arises when the Board of Governors appointed by the shareholders are supposed to act in the shareholders interest. However, executive compensation, executive privileges, payouts, and bonuses to the top tier management are often seen as the examples of agency problem. The agency cost resulting from this principal agent problem can be broadly classified into three times of cost.

- 1- Monitoring cost,
- 2- bonding cost, and
- 3- the residual loss.

Similarly, weak governance structure in the organization can also result in the moral hazard. Moral hazard refers to the practice of accepting and taking unnecessary risk while acknowledging that they will not have to accept the full burden of responsibility in case of the loss. It also shows how the behavior of an individual manager or a firm change when the risk and adverse effect of their decision making is borne by others. This situation is quite common in corporate finance culture where directors acting as the agent selected by the principal owner of the firm i.e. shareholders.

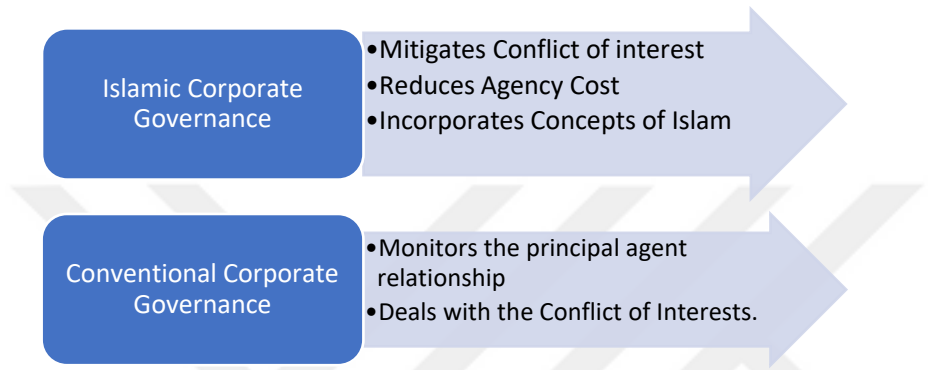


Figure 2.4: Comparative Analysis of ICG vs CCG

In order to avoid all such issues and to maintain a healthy balance between shareholders and the management strong corporate governance practices are emphasized. Core et al. (1999) argues that weaker CG raises the agency cost associated with the firm. He further finds that in the case of week corporate governance mechanisms CEOs and the top management make better compensation. He demonstrated the relationship between weaker corporate governance practices and the additional compensation and connected it to the poor operational performance of the firms. Wright et al. (2002) also studied the link between corporate governance framework and executive compensation. They found that managerial compensation is higher in defense which are not strong in corporate governance practices. These studies show that complete governance is related with the agency problem and any deficiency in the governance framework can allow the

management today's conflict of interest and increase the agency cost. Thus, we can deduce that good corporate governance practices are substantially associated with a sustainable financial performance and significantly reduces the agency cost (Jensen and Meckling 1976). Good corporate governance mechanism is also fundamentally important in eradicating the moral hazard problem.

### **2.3.3 CG and Accounting Frauds:**

Ever since the evolution of financial market, financial reporting malpractices have been observed frequently. These malpractices, also known as the accounting frauds, occur due to the lack of properly devised set of mechanisms that should have ensured the accountability, efficiency, and effectiveness of the corporate policies. In order to avoid these financial reporting malpractices, organizations ensure that they have the standard set of procedures which would decrease any chances of these events happening. Imamah, Lin, Handayani, & Hung, (2019) actually found that the improved governance practices reduce the information asymmetry between the shareholders and the top management. They also claimed that the stronger corporate governance in fact encourage the top management to release the reliable financial statements and relevant financial information in a timely fashion. This timely declaration of financial information reduces the irregularities and help the

financial institutions to sustain their financial performance. This was one of the primary reasons of implementing the corporate governance practices in the corporate culture.

There should be a true rational model of governance in the organization which must be based on the laws of Shariah in order to achieve the sustainability in financial performance of the firm. Such model of governance should be competent enough so that it can be easily applied to the firm. However, in current scenario, the conventional governance models used by the firms are not according to the standards of Shariah. The transformation of the conventional corporate governance into the Islamic corporate governance is a real challenge and task in hand. The need of introducing ICG arises due to the increase in the demand of financial system and financial instruments which offer the opportunities to the people who want to invest without letting down their faith. By applying the Shariah based governance system, a firm may efficiently control the various sort of irregularities that may lead towards lack of sustainability in financial performance.

The usage of conventional corporate governance (CCG) may disturb the internal and external stakeholders of the firm, and ultimately the sustainable financial performance of the firm, which may lead to the recession in the economy as a whole. The CCG may affect the:

- strategic organizational policies,

- workflow of the employees,
- strategic customer support,
- market segmentation, and
- geographic expansion in various ways.

The efficient and reliable implementation of these policies are fundamental to the monetary growth of the organization in a feasible manner. The main issue behind the implementation of CCG is the lack of equality in over-all system of the firm. And the existence of lack of equality in the system, may create so many hurdles for growth in terms of employees, customers, organizations, and the economy as a whole. So, by fixing the issue behind the use of CCG, an organization may promote the equality in the over-all system which is essential for the sustainable financial performance at the firm and the institution level. However, failure to implement the set of governance procedures effectively may lead to the recession in the market.

#### **2.3.4 Risk management of ICG vs CCG:**

The theoretical foundations of conventional corporate governance and Islamic corporate governance framework differ significantly with each other with respect to the risk management. Although, both approaches have suffered the financial fraudulent activities and crisis in the recent times, however, the number of cases in ICG only represented a small

fraction of the larger Islamic banking industry that had otherwise remained unaffected by the financial crisis. This resilience was due to crucial ingredients of the Islamic banking system.

First, the solid foundation of Islamic banking that prohibits, inter alia, the involvement of IFIs in interest-bearing and speculative financial instruments. For instance, the IFIs could not hold assets such as a credit derivative swap ('CDS') or collateralized debt obligation ('CDO') because such assets do not comply with Sharia' law. Second, the unique feature of the Islamic corporate governance system, which is to avoid the unnecessary and speculative risks in the portfolios and investments, shielded the majority of the IFIs from the aftermath of the financial crisis in 2008.

### **2.3.5 Performance of ICG vs CCG in Financial Crises:**

In brief, this chapter focuses on examining the concept of corporate governance under the Sharia' law and its distinguishing features from the conventional corporate governance concept based on their respective theological, ideological and corporate culture orientations. Corporate governance forms an indispensable element in the structure of any corporation. For an important institution such as a bank, a strong corporate governance framework serves as a crucial feature in maintaining the public's trust in the institution as a

guardian and intermediary for the safekeeping of money and the rewarding of investment.

Gradually, the concept of corporate governance has developed and begun to attract renewed attention from policymakers around the world, particularly after a series of landmark corporate failures over the last few decades. These failures included the collapse of Barings Bank in 1995, Enron, Arthur Andersen and WorldCom in 2002, Merrill Lynch, Bear Stearns and Lehmann Brothers in 2008, and the subsequent inability of major banks such as the Royal Bank of Scotland and Lloyds Banking Group to sustain themselves without government support.

As soon as the sub-prime mortgage crisis in the United States of America triggered the global financial crisis in 2008, the after-effects swiftly reached the European continent and started to take its toll on several high-profile European financial institutions. In the United Kingdom, the crisis severely hit Northern Rock and prompted the government to nationalize the bank in February 2008. In Germany, the IKB Deutsche Industrie bank became the first financial institution in the country to be rescued by a government-led bailout. Sachsen LB followed suit when it was bailed out by Landesbank Baden-Wuerttemberg, a public-sector bank. In France, the crisis prompted BNP Paribas to halt withdrawals

from its three investment funds after witnessing their share price plunged by almost 20 per cent in less than two weeks.

Since then, the global financial crisis had exposed the Western banking industry to concerns from economists regarding its business strategies, solvency, image, reputation, and public relations. In the United States, the credit crunch has brought a crisis of reputation to its banking industry with banking institutions performing worse than pharmaceutical companies, oil and gas companies, airlines, media outlets, and telecommunication firms in terms of reputation with the public. Similarly, in Europe, the Eurozone sovereign debt crisis severely affected public confidence in European financial institutions. After the 2008 financial crisis, the banking industry ranked as the least trusted industry globally as a result of having a poor reputation for illegal and unethical behavior.

This lack of trust and public confidence prompted the financial service community to look at the concept of ethical banking, with Islamic banking touted by economists and finance experts as a suitable alternative. By 2016 and 2017, global trust in the banking industry has significantly improved but it remains the least trusted industry compared to energy, food and beverages, and technology industry.

However, Islamic banking is not a perfect alternative. In fact, there have been examples of corporate failures in high-profile

IFIs within the last two decades including the collapse of the Islamic Bank of South Africa in 1997; the demise of the Ihlas Finance House in Turkey in 2001; the commercial losses of Bank Islam Malaysia Berhad in 2005; and the various fraudulent cases that led to losses in the Dubai Islamic Bank between 2004 and 2007. Additionally, the 2008 global financial meltdown affected several other IFIs such as the Kuwait Finance House, Al- Rajhi Bank, Al-Hilal Bank, and the Noor Islamic Bank of the United Arab Emirates, which prompted a bailout from the Emirate of Abu Dhabi when the crisis began affecting the Dubai government.

### **2.3.6 Islamic corporate governance and firm performance:**

The transformation of conventional corporate governance mechanism into the Islamic corporate governance framework is regarded as a theory where ICG relates its theoretical framework of decision making within the rules set by the Islamic Shariah. The core concept of all this Islamization of corporate governance is the concept of the “Tauheed”, the belief that there is one and only one God. Considering Him the sole source of power and might, we can take decisions within the framework of our human authority, gratefully accepting the privilege granted by the God to us and understanding that this limited authority grant is the subset to His mighty and all

authority. Choudhury and Hoque (2006) regard the ICG as the faith based theoretical framework within the socio-scientific epistemology of Tauheed. They claim that the Islamic corporate governance under the banner of Shari'ah impact the transaction cost and the decision-making mechanisms associated with them.

However, transaction cost is not the only phenomena that is affected by the transformation of conventional governance practices into Islamic corporate governance. Lewis (2005) list down the obligations consistent with the show your principles. According to Lewis, the implications of Islamic corporate governance affect all the creditors, suppliers, vendors, customers, competitors, and employers of the organization. He also insists that ICG is not only liable to embrace the material needs but also satisfy the spiritual gains of all the stakeholders. According to him, ICG has to strike a balance between the materiality and spirituality.

Kasri (2009) also highlights a fundamental point of difference between conventional and Islamic corporate governance. He argues that objective of corporate companies in the conventional perspective is to maximize the wealth of shareholders by maximizing the profit. Whereas, in Islamic perspective the individual and the corporations' objective is to scum the respective material desires to the will of ALLAH. Hence, in Islamic corporate culture the prime objective

becomes adherence to the path specified by Shari'ah. The whole perspective of Islamic finance and its corporate governance mechanism is developed on the notion that the betterment of society comes before hand the betterment of an individual.

#### **2.4. Legal orientation and corporate governance framework:**

La porta et al. (1998) in their landmark study titled “Law and Finance” investigated the impact of various legal orientations on the financial corporate structure. They found that the countries designed with the common law tend to have greater shareholders protection and thus are more liable to produce the financial information in timely fashion. Whereas, the countries having various versions of code law rely more on the relationship between the creditors and the financial institutions and thus the demand of timely financial information is less in countries with code low infrastructure as compared to the countries which have common law. They focused on the two building blocks of corporate governance first one being the legal protection of investors or shareholders and the second one is the ownership concentration in the corporations. Smith (1993) and Keasey et al., (1997) identified the separation of beneficial ownership and executive decision making as the underlying major issues in the conventional corporate governance set up.

Becht and Barca (2001) provide a detailed account of quantitative approach of various governance models designed to tackle various issues. Following are some of the models, they mentioned in their paper:

- a) the takeover model.
- b) block holder model.
- c) delegated monitoring and large creditors.
- d) board models; executive
- e) compensation models; and
- f) multi-constituency models.

Iqbal and Lewis (2009) also classified the prevailing corporate governance codes into six different modes which are represented in the following flow chart

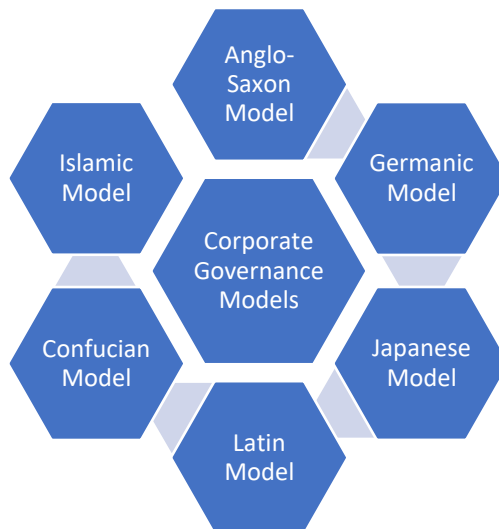


Figure 2.5: Prevailing Corporate Governance Models

## **2.5. Theoretical Framework of Governance Models in ICG and CCG:**

From a general perspective, there are three features that can distinguish the Western corporate governance system, which is represented by the dominant Anglo-Saxon and the German models, from the Islamic corporate governance system. The first differentiating factor lies in the theoretical foundation that has played a key role in the existence of both systems. While agency theory and stakeholder's theory formed the foundation of the Western corporate governance system, the Islamic corporate governance system grounded itself on a stewardship theory model.

### **2.5.1. Agency Theory:**

According to the agency theory, which is based on the rationale that a person will always choose a decision that optimizes his or her economic interest, whereas, the Anglo-Saxon corporate governance model concentrates more on profit maximization and the protection of shareholders' rights and interests than the interests of other stakeholders. As the agent of the shareholders, the BOD is responsible to preserve and enhance the shareholders' wealth by engaging in business activities deemed beneficial to the shareholders and acting as a mediating authority that synchronizes the management's

decisions and conducts with shareholders' profit-maximization ambition.

In other words, the corporate governance approach advocated by the Anglo-Saxon model is narrow in its scope as it might be said to ignore the influence of the external environment within which the company exists that can also influence its success.

### **2.5.2. Stakeholder Theory:**

On the other hand, the stakeholder theory places a significant emphasis on the objectives and interests of the other stakeholders such as the employees, creditors, suppliers, community, and the environment and calls on the company to consolidate them in its decision-making and future planning. Proponents of stakeholder theory claim that a company's activities have direct and indirect effects on the external environment within which it operates, thus, rendering the company responsible to the wider audience other than its shareholders.

Accordingly, the BOD and the management team must ensure that the corporate governance structure of the company reflects its commitment to safeguard and enhance interests of a wider constituents of stakeholders. The theory does not change the roles and functions of the BOD but merely expands them, which now must respond to the needs and interests of the other stakeholders. Likewise, the essence of the theory does not

necessarily call for directors to abandon or leave the pursuit of shareholders' profit maximization in limbo as it remains possible for directors to satisfy the interests of a wider stakeholder constituents whilst striving to maximize shareholders' value at the same time.

### **2.5.3. Stewardship Theory and ICG:**

By comparison, the stewardship theory, which underlines the foundation of the Islamic corporate governance system, regards the IFI's management, namely the BOD and the Sharia' board, as stewards, who shoulder the responsibility to lead the IFI towards achieving the business goals of the company that correspond to the tenets of the Sharia' law. From this perspective, it is reasonable to suggest that the Islamic corporate governance system shares similarities with the German model in the sense that both cater to a much larger audience comprising both shareholders and other stakeholders such as the general public and the environment.

This philanthropic approach corresponds to the Sharia' principle of Maqasid As-Sharia', which calls for companies to refrain from placing too much emphasis on the profit-maximization of their shareholders neglecting the rights and interests of other stakeholders such as those of the God, the religion, and the society . Instead, companies must seek to strike a balance between the shareholders and stakeholders'

interests and ensure that everyone involved in the business operations and endeavours of the companies can perform their responsibilities to the best of their abilities.

Ultimately, Muslims believe that this staunch corporate integrity not only enhances the company's goodwill as a socially responsible entity, but also invites the blessings of God that will pave the way to the company's success, both in this world and the Hereafter. Islamic corporate governance weighs all the good aspects of the conventional governance mechanisms according to the Islamic faith and laws. Their key purpose is to devise such strategies which are vital to accomplishing and upholding faith and assurance of public in the financial system (Shibani & De Fuentes, 2017).

#### **2.5.4- Anglo-Saxon Model:**

Another feature that differentiates Islamic corporate governance from the Western governance model rests within their respective approaches towards corporate culture. In the Anglo-Saxon model, the generation of profits and the maximization of the shareholders' interests serve as the primary objectives of the company and hold primacy over the interests of other stakeholders. By contrast, the German model treats the interests of every stakeholder as equal and as significant as those of the shareholders due to their intrinsic values and substantial influence on the performance and

sustainability of the company. To put it simply, the German model places a profound focus on the collective interest of a wider range of stakeholders and tends to foster a more societal influence than the Anglo-Saxon model.

Corporate governance scholars and economists have viewed the Anglo-Saxon model as a weak corporate governance system because it does not effectively address the agency problem. An agency problem arises when the stakeholders' interests clash with those of the company's shareholders and its management causing a 'whom-do-you-protect first' dilemma for the management. This is the case even in the presence of several attempts to reconcile the interests of the shareholders with those of the stakeholders, because the eventual goal of a company which adopts the Anglo-Saxon model remains the maximization of the shareholder's wealth.

### **2.5.5 German Model of Corporate Governance:**

By contrast, the German model provides a better and more equitable alternative that balances the interests of the shareholders with those of the stakeholders. This is due to the fact that stakeholder theory not only mandates the company's management to maximize the value of the company as a whole by taking into account the interests of a wider range of constituents such as the general public, but it also allows these stakeholders to participate in corporate decisions.

On the other hand, the Islamic corporate governance system seeks to promote the alignment of the economic interest of the company, its shareholders, and the other stakeholders with the principles of the Sharia' law. In the Islamic banking environment, the system calls for the IFIs to place the interest of the stakeholders on the same footing as those of the shareholders with Sharia' law acting as the fulcrum that bridges the two. In fact, it is important to note that Islamic banking neither aims to provide a direct financing competitor to the Western banking system, nor it serve as a financing tool for the IFIs to generate profit; rather, it aspires to function as a society-oriented financing proposition.

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## **2.6 Regulatory Bodies of ICG:**

Although Shari'ah supervisory boards are completely in position to issue a fatwah and oversee the launch and implementation of Islamic corporate governance but there are other regulatory authorities as well who with the help of their members, diverse group of scholars, economist and financial experts, issue generic guidelines for the enforcement of Islamic corporate governance.

Two of these regulatory bodies are

- Accounting and Auditing Organizations for Islamic Financial Institutions (AAOIFI)
- Islamic Financial Services Board (IFSB)

### **2.6.1 Shari'ah Regulatory authorities in different countries:**

At the moment, there is a growing number of countries that have either adopted or are in the process of opting for a national Sharia' board to act as the apex of Sharia' decisions for their respective Islamic banking markets. These countries include Sudan (the High Sharia' Supervisory Board), Malaysia (the SAC of CBM), Pakistan (Sharia' Board of the State Bank of Pakistan), the United Arab Emirates (HSA), Bahrain (National Sharia' Board of the Central Bank of Bahrain), Oman (Sharia' Supervisory Authority of the Central Bank of Oman),

Nigeria (Sharia' Council of the Central Bank of Nigeria), Bangladesh (Central Sharia' Board for Islamic Banks of Bangladesh) and prospectively Morocco. Although their names vary from one country to the other, the Sharia' board serves towards a single purpose, namely, to act as the highest Sharia' authority in the country.

Among these countries, the Malaysian centralised governance system presents the most unique framework as it involves two national Sharia' boards that regulate the diverse Malaysian Islamic banking market. The SAC of the CBM is responsible for the supervision of the general Islamic banking and Takaful activities in the country. In addition, another SAC is formed under the Securities Commission of Malaysia to supervise and regulate all Sharia' issues relating to Islamic capital market. This framework was followed by the Maldives, which also formed an independent Capital Market Sharia' Advisory Council ('CMSAC') in December 2013 pursuant to its Capital Market Development Authority Act (CMDA)

### **2.6.2 Shari'ah Advisory Consultation firms:**

In the last two decades, Sharia' advisory firms have become an important source of consultation for IFIs because of the industry's shortage of Sharia' scholars possessing expertise in the field of Fiqh Al-Muammalat. To a certain extent, the formation of a Sharia' board at the IFI-level was neither

considered necessary nor practical. However, the common practice of IFIs consulting Sharia' advisory firms for Sharia' compliance assurance gradually evolved into a global trend. The practice, which started in Kuwait in 2003, escalated beyond Qatar and Saudi Arabia in order to meet IFIs' continuous demands for Sharia'-compliance advisory as the global Islamic banking industry expanded.

A Sharia' advisory firm is an independent organisation that provides IFIs with consultation and advisory services pertaining to any Sharia' compliance issues. Apart from endorsing the financial products and services offered by the IFIs, it also provides Sharia' review and audit services; akin to those offered by any public audit firms. Moreover, there are also several Sharia' advisory firms such as the Islamic banking and Finance Institute of Malaysia ('IBFIM'), the Minhaj Advisory and the Islamic Finance Advisory and Assurance Services ('IFAAS') that have begun offering the IFIs unique services such as talent development programs for banking professionals and the formation of knowledge management centres ('KMCs') in facilitating further research and innovation of Islamic banking products.

In addition, it is worth noting that not every IFI can afford the services of an in-house Sharia' board due to common business challenges such as a deficiency in working capital, the small size of the business operation, and the shortage of qualified

and experienced Sharia' scholars in the industry. For example, the Australia-based Iskan Finance has neither a Sharia' advisor nor a Sharia' board. Instead, it modelled its Islamic financial products based on the advice and Fatwas of leading Sharia' scholars from the Al-Azhar Seminary in Egypt. Further, as the regulatory framework of a decentralised Islamic corporate governance system does not mandate the formation of a Sharia' board at the IFI-level, the services of Sharia' advisory firms are also preferred by non-IFIs that offer limited Islamic banking products which are based on simple Muamalat principles such as Wadiah, Mudarabah, Musharakah, Ijarah, and Takaful.

At present, a number of renowned Sharia' advisory firms offer consultation services on Sharia' issues pertinent to Islamic banking. These include the

- Shariyah Review Bureau,
- the Institute of Islamic Banking and Insurance ('IIBI'),
- Yasaar Limited, Minhaj Advisory, IBFIM,
- the Association of Sharia' Advisors in Islamic Finance ('ASAS'),
- Taqwa Advisory and Sharia' Investment Solutions ('TASIS'),
- Israa Capital and Amanie Advisors.

Although the advisory services of these firms cannot be compared to that of an in-house Sharia' board at the IFI-level, the increasing cost of maintaining a proper panel on a Sharia'

board plays a significant factor in influencing the IFIs to consider opting for these alternative mediums which provide a preferable Sharia' consultancy service in terms of time and cost efficiency.

However, the majority of these advisory firms also comprise Sharia' scholars who are themselves Sharia' board members of the IFIs. From a sound corporate governance perspective, the occupancy of multiple Sharia' board positions can present a number of challenging issues such as a potential conflict of interest, time management, and confidentiality concerns due to the roles and scope of duties owed by the IFI's Sharia' board members which include the handling of sensitive and confidential information of the IFI. On one hand, it is arguable that the industry can profit from the vast knowledge and experience of these scholars as it expands. In fact, the composition of a diverse range of Sharia' board members from the different IFIs advising the firms' Sharia' board assures a better collective Sharia' decision that incorporates practical views from the different jurisdictions and schools of Islamic jurisprudence.

On the other hand, it is arguable that the regulatory and supervisory authorities should introduce a specific statutory provision regulating the participation of the IFIs' Sharia' board members in Sharia' advisory firms. In fact, the growing complexities of the industry from innovative and sophisticated

Islamic financial products to the bureaucratic compliance requirements of local legislations demand specific attention from Sharia' board members. If a Sharia' board member occupies too many Sharia' board positions, it can pose serious question for his or her ability to provide the IFI with prudent and quality Sharia' advice.

### **2.7. Historical Background and theoretical Perspective of SSB:**

Shari'ah Supervisory Board is the fundamental key corner stone of Islamic Corporate Governance. They are responsible for the approval and interpretation of the Islamic rules and regulations. They also monitor the launch of Islamic financial instruments. The various aspects of historical and theoretical background of SSB, discussed in this thesis, are depicted in the following flowchart.

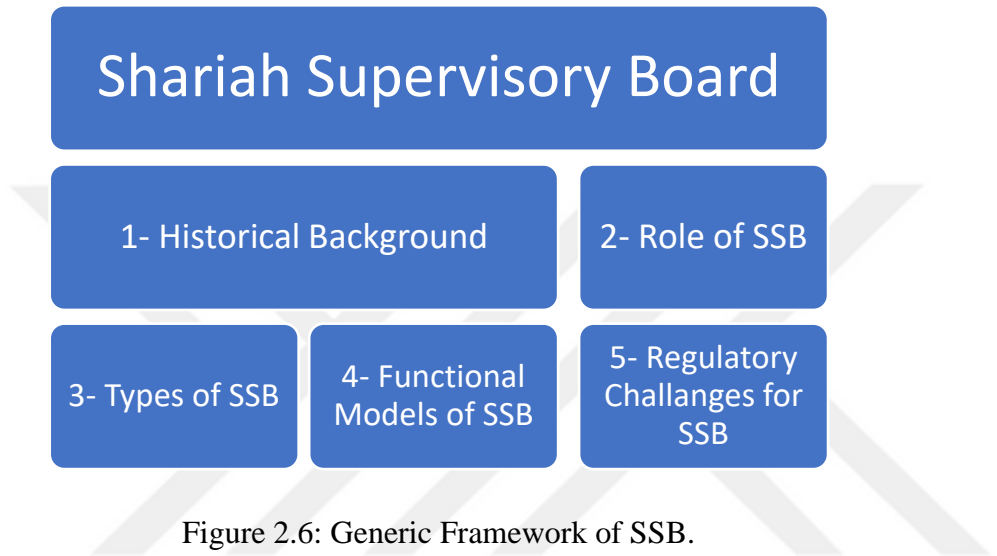


Figure 2.6: Generic Framework of SSB.

### 2.7.1 Historical background of SSB:

From an historical perspective, the idea of centralisation of Fatwa in Sharia' law was first mooted during the reign of Caliph Harun Al-Rashid circa 790 CE, where the Caliph proposed the full implementation of Imam Malik's Al-Muwatta'; a concise collection of famous and credible Hadiths from a trusted chain of narrators. Although the Imam refused this proposal out of his respect for the opinions of other Sharia' scholars, it marked the first attempt by an Islamic state to systemise the divergent Fatwas between the various schools of Islamic jurisprudence. Likewise, the proposal of Abdullah Ibn Muqaffa, a Persian Islamic thinker, to compile all the Fiqh opinions and grant them a binding status, and the famous Al-Majelle, a codification of the Fatwas on Fiqh AlMuammalat

issued by Imam Hanafi, the founder of the Hanafi school of Islamic jurisprudence, also exemplify the early initiatives of Fatwa standardisation in the Islamic history.

As far as Islamic banking is concerned, the idea of a national Sharia' board was mooted in 1993 during the 8th session of the Council of the Islamic Fiqh Academy, where the formation of a supreme Sharia' board was proposed as a means to assist in the harmonisation of Islamic banking Fatwas, standards and practices between IFIs around the world. Apart from serving as the sole authority for any Sharia' issues related to Islamic banking, the idea of a national Sharia' board was also advocated as a means to accommodate a number of issues which are only specific to the Sharia' law system such as Al-Ikhtilaf Fi Al-Fuqaha (the differences of opinions between Sharia' scholars).

Due to the existence of the different schools of Islamic jurisprudence, it is not an uncommon situation that an Islamic financial instrument approved in one country is not approved in another. This is attributable to the different Sharia' opinions of the different Islamic financial institutions' Sharia' boards across the jurisdictions as a result of the variant school of thought orientation among the Sharia' board members. For example, the interpretation of the Sharia' law is liberal in Malaysia and Egypt, intermediate in the United Arab Emirates, but strict in Saudi Arabia and Kuwait. In fact, these differences

not only occur between the major schools of Islamic jurisprudence, but also within a same school of thought.

In other words, the variation of opinions can even occur in a country that only subscribes to the principles and teachings of a single school of thought process. On a global scale, the centralisation of Fatwas and standards in Islamic banking remains a sensitive issue as it involves balancing the traditional and modern understanding of Al-Ikhtilaf Fi Al-Fuqaha on one hand, and creating a symmetry platform of understanding that addresses the specific concern of the global Islamic banking industry on the other. The final section of this chapter will specifically explain the issue of Al-Ikhtilaf Fi Al-Fuqaha within the context of the Islamic corporate governance system of the Islamic banking industry.

### **2.7.2 Role of Shari'ah supervisory Board:**

It is an authoritative body which regulates, implements, and evaluates the compliance of Islamic corporate governance. Their major task is to reform the existing or the conventional governance mechanism according to the boundaries specified by Islam. Organization are seeking approval before implementing the ISB and then the SSB are retained to manage and govern its implementation and compliance. The most important part of their job is to make sure at no point issuance of new policy, procedure, or any new financial product negate

the core beliefs and faith as specified in Islam. In the codes, Shari'ah Supervisory Board (Hereafter SSB) is defined as follows.

The AAOIFI Governance Standard No.1 defines a Shari'ah board as

“an independent body entrusted with the duty of directing, reviewing and supervising the activities of IFIs for the purpose of Shari'ah compliance and issuing legal rulings pertaining to Islamic banking and finance” (AAOIFI, 2005: 4).

A similar definition is given by the IFSB-10, which refers to

“a body comprised of a panel of Shari'ah scholars who provide Shari'ah expertise and act as special advisers to the institutions” (IFSB, 2009c: 1).

Any product or specific policy which is unable to seek the approval of SSB due to any certain reason is subject to the Sharia non-compliance risk. It is a specific type of risk which is defined by the IFSB-3 as following,

“the risk that arises from IFIs' failure to comply with the *Shari'ah* rules and principles determined by the *Shari'ah* board or the relevant body in the jurisdiction in which the IFIs operate” (IFSB, 2006a: 26).

Although Islamic banking had started as early as 1963 with the formation of IFIs such as the Mit Ghamr Savings Bank, the Nasser Social Bank of Egypt, and the Dubai Islamic Bank, the

formal institution of the Sharia' board was not present within the IFI's corporate governance structure, at least until 1976, as it did not constitute a requirement for the overall functioning of the IFIs. The establishment of the Faisal Islamic Bank of Egypt that year marked the first leap in the development of a unique and systematic corporate governance system for the industry that was soon followed by several IFIs around the globe such as the Jordan Islamic Bank, the Faisal Islamic Bank of Sudan, the Kuwait Finance House, and the Bank Islam Malaysia Berhad.

### **2.7.3 Types of SSB:**

Banaga and Tomkins (1994: 11) classify the Shariah supervisory board according to their function and composition into three times types,

- The first type of SSB serves the organization in terms of their legal expertise. They guide the corporations on the legal issues regarding the implementation off Islamic corporate governance,
- the second type of board is the in-house council, also sometimes referred as the in-house Shariah Department. In this SSB, there are experts which gave their expert opinion on the matter of internal organization of the company.

- The third type of SSB mentioned in the paper is the diverse group of scholars, also consisting of non Shari’ah experts in order to have a varied and authentic point of view from different mindsets.

#### **2.7.4 Functional models of SSB:**

Currently there are two modes of Shariah supervisory board that are being used across the globe. Either each financial institution has its own advisory Board which advises the respective organization on the matters pertaining to Islamic finance. In this type of setting financial corporations hire Islamic scholars who are both reputable and knowledgeable to understand the functioning of the financial instruments as well as have the authority to declare the fatwah when and where necessary. This type of setting is referred as decentralized system. An alternative framework is having a centralized advisory board generally under the control of the differences through the implementation and enforcement of uniformed Sharia' decisions. This will benefit the Islamic financial institutions within a country through reliance

In a centralized setting, Islamic financial institutions rely on the advices and Fatwas issued by the central institutional authority, generally developed by the government of that specific country. All Islamic financial institutions perform their duties under the framework and guidelines issued by that

centralized authority. In contrast to the centralised Islamic corporate governance system, an IFI operating in a decentralised system relies on the advices and Fatwas of its own Sharia' board and also considers those issued by the Sharia' boards of other IFIs. At present, several countries have adopted the decentralised system, namely, inter alia, Kuwait, Qatar, Jordan, Singapore, and the United Kingdom.

The decentral system also allows flexibility to the Islamic financial institutions and the management team in terms of the adoption of Islamic banking Fatwas due to its regulatory structure, which does not mandate the IFI to follow a set of specified Fatwas. In simple terms, its corporate governance structure is internally driven and more IFIs-specific. It grants more freedom to the Islamic financial institutions to adopt Fatwas that immediately suit their legal and business environment than the centralised system.

#### **2.7.5. Regulatory Challenges for the Shari'ah Board:**

The differences of Sharia' opinions in the industry has confused both Muslims and non-Muslim stakeholders alike. Accordingly, a crucial need exists for the Islamic banking market players to agree on a common platform to mitigate the risk of inconsistency of Fatwas within and between jurisdictions. Arguably, the formation of a centralised Sharia' board at the national level can help to consolidate and resolve

these differences through the implementation and enforcement of uniformed Sharia' decisions. This will benefit the Islamic financial institutions within a country through reliance on a consistent set of Islamic banking Fatwas and standards and it will also enhance and expedite cross-border transactions between the IFIs across jurisdictions. Nonetheless, there remain several key challenges that demand immediate attention from the industry regulators before the harmonisation effort of Islamic banking Fatwa and standards can be achieved. These include, the conflict of laws between jurisdictions,

- the conflict of Sharia' opinions between the various schools of thought, and
- the formation of a competent dispute resolution mechanism for Islamic banking cases as an alternative to the civil court, which may not possess sufficient expertise to try such cases.

In contrast with the decentralised Islamic corporate governance system, the Sharia' decision of a national Sharia' board binds all the Islamic financial institutions in the country. In the United Arab Emirates, for instance, article 5 of the Federal Law No. (6) of 1985 requires the Higher Sharia' Authority to act as the final authority on Sharia' matters related to Islamic banking and its decisions bind all the IFIs in the kingdom. Likewise, in Malaysia, section 58 of the CBMA 2009 stipulates that in the event of conflict between the Sharia'

rulings issued by the Sharia' board of an Islamic financial institution and the SAC, the latter's rulings shall prevail. Furthermore, section III of the SGF 2011 not only mandates the board of directors to implement the Fatwas of the Islamic financial institutions' Sharia' board, but also prohibits the board from altering the Fatwas without the Sharia' board's consent.

However, this accommodating governance structure also presents a crucial question about the actual roles and scope of authority of the Sharia' board within the Islamic financial institutions whether the Sharia' board has an executive function in enforcing the implementation of its Sharia' decisions or whether its function is merely restricted to an advisory one? This latter issue highlights the significant regulatory challenges that the industry faces, which can appear even more challenging for new and emerging markets operating in non-Islamic legal environment such as the United Kingdom, United States of America, China, Turkey, and Luxembourg. For example, in the United Kingdom, an Islamic financial institution must demonstrate that its Sharia' board only plays an advisory role and does not interfere with the management of the Islamic financial institutions. Likewise, in the United States of America, the role of the Sharia' board in a financial institution including for example its interaction with its management must be precisely determined.

Notwithstanding the above concern, it is arguable that given the robust development of more sophisticated and competitive Islamic financial products to meet the growing complexities of stakeholders' needs, Islamic financial institutions' Sharia' board members have become more involved in product development processes that could lead to a more executive role. Under this circumstance, the role of a Sharia' board member will more likely resemble that of an Executive Director than a Non-Executive Director. In fact, the evolving nature of the functions and roles of the Islamic financial institutions' Sharia' boards will also subject the contentious practice of multiple Sharia' board directorships to scrutiny due to significant conflicts of interest and Sharia' compliance issues, a subject which the thesis will scrutinise in detail in the subsequent chapters.

**CHAPTER 3:**  
**METHODOLOGY**  
**RESEARCH DESIGN:**

In this dissertation, to investigate the influence of Islamic corporate governance on the sustainable financial performance of the financial institutions, qualitative approach has been used. Although during the course of the investigation, there were two modes of analysis that is quantitative and qualitative. For the quantitative perspective, we need the indicators proxying the financial performance of financial institutions and some sort of index representation the governance practices in those institutions. Although, in the literature certain indexes has been utilized to represent the conventional corporate governance mechanisms however, we couldn't find a reliable, agreed upon index which can be held accountable for the true depiction of Islamic corporate governance in the literature. Moreover, since the purpose of this study was not to co-relate the Islamic corporate governance with the firm performance, but rather to understand the theoretical framework and the underground reality of the impact, this transition of

governance practices folded in Islamic ideology and faith have on the overall financial environment of the institution. Therefore, we opted for the qualitative analysis which gives us the insights and better understanding on the question, it's overall impact, and the logical narration of the premise or the hypothesis we can deduce from the argument. Since these are the emphatically subjective backgrounds which cannot be measured or quantified, however, can be understood and analyzed through qualitative techniques.

The main purpose of qualitative analysis is to explore the underlying meaning of a deep-rooted change in a systematic way. Its main purpose is to increase an understanding of fundamental whys and wherefores, views, and incentives. The application of the qualitative approach enables us to understand the flip side of the coin and presents the opportunities of alternate reality being reviewed and understood. Another fine aspect of qualitative examination is that it exposes the underlying layers and it gives us insights regarding how this specific issue or problem is structured and layered up. This is done by very delicately removing each and every layer of their phenomena. This cross examination of a specific issue by the use of the qualitative mechanisms not only present us with the opportunities of realizing the ultimate goal of perceiving how this behavioral or social problem in

question was constructed , spread, applied, taken into and out of context, and finally the implications it may have. The investigation of any problem with respect to the qualitative approaches offers new vision and incentives. It grants the thought-provoking exterior that tend to sense the sentiments and suppositions in the issue being explored. Though quantitative techniques can provide us the exact scientific solution and relies on the facts and data and number crunching methodologies whereas qualitative solely focus on the assisting, evaluating and investigating the human behavior part of the issue normally a social question intriguing the large factions of the society. Since there is no reliable model for measuring and quantifying the human judgmental sense, social scientist and researchers rely heavily on the qualitative techniques that are meant to unearth the core of the problem in hand.

John Creswell (2003: 215) lists the five genres of qualitative analytical approaches. Though, all these approaches use the same mode of data collection procedures that is by

- Observation of the phenomenon and the participant’s point of view,
- Textual analysis, and
- Conducting the interviews (Structured or semi-structured)

However, their end results are quite different from each other. This difference in their interpretation and content analysis is due to the different direction they take notably in textual analysis. The beauty of qualitative analysis and its distinct kinds lie in the presentation of endless dimensions that can be taken from one point of view. However, social scientists or researcher's job is to either induce the generic implications from that reasoning or to deduce the generic premises into the explicit specific conclusion which resonates with the rest of the statements and can aptly present the broad set of premises that were studied to reach this conclusion or hypothesis. The qualitative analytical approaches highlighted by the John Creswell are

- Ethnography: This is the method approach where the researcher submerges himself or herself into the environment of target contributor. The purpose is to experience all the environmental, social, ethnical factors that lead to the contributors' point of view and final response.
- Narrative: Here the researcher plunges into the in-depth discussion and textual analysis to come up with a custom unified story/narrative.
- Phenomenological: This isn't more vibrant and diverse methodology where the researcher has to jump from one position to another to conclude logical

interpretation of the event. It involves discussion interviews, studying the case, field tours among many other modes of judging and comprehending the situation.

- Grounded theory: It allows the researcher to come up with a clarification or a theory based on information collected via sequence of exposed and axial coding methods to classify the different themes.
- Case study: It explores the numerous kinds of information platforms which may be descriptive or investigative in nature. As a matter of fact, any viable mechanism related to the case in hand is included in the analysis.



Figure 3.1: Constituents of Case Study

There are many qualitative techniques which are used in the literature to understand this systematic change. In this study, we also intend to utilize these specific skill sets which are necessary to understand the phenomena known as “Islamic

corporate governance” and how the implementation of corporate governance framework in a line with the Islamic ideology impact firm performance. Semi structured interviews were conducted, and their responses were recorded and analyzed for this purpose. The understanding and the views of the participants were recorded in the form of non-numeric data. Our point of concern during this exercise was

- to gather the information correctly,
- to perceive the core layer of the phenomenon via inducting reasoning,
- offering to originate and come up with generic explanations and clarifications.

Since very few studies have explored the impact of Islamic corporate governance on the sustainable financial performance of the farms, we conducted the semi structured interviews to examine how the inclusion of Islamic ideology and faith in the governance mechanisms will allow the financial institutions to sustain their financial performance.

### **3.1. Philosophical perspective of the Research Methodology:**

In the context of philosophy, this research is constructivist and is built on the subjective approach. By nature, constructivism admits truth as a paradigm of human mind, so truth is supposed to be idiosyncratic. Furthermore, this logical method is

narrowly linked with practicality and contingency. Constructivism viewpoint is grounded on mental consciousness and its background relates to method of Socrates, earliest Greece. However, admiration of constructivism as a viewpoint in epistemology improved in past few years. Constructivism is generally a learning's philosophy originated on the principle that, by reproducing on our familiarities, we build our personal empathetic of the world we live in. Each of us generates our personal "guidelines" and "rational models," which we practice according to our intuition and intellect. Knowledge, consequently, is merely the procedure of altering our rational models to lodge innovative practices. "Constructivism" has numerous distinct connotations, all grounded on the impression that something is being "built."

Constructivism (also known as Constructionism) is a comparatively latest viewpoint in Epistemology that outlooks all of our information as "built" in that it is depending on resolution, insight of human and communal knowledge. Consequently, our information does not essentially mirror any outside or "unequaled" truths. Its exponents to be an alternative to classical Rationalism and Empiricism measure constructivism. The constructivist opinion is mutually practical and relativistic in nature. It clash with Positivism and Scientism in that it upholds that scientists construct scientific knowledge, and not exposed from the world over firm

technical way, and it grasps that there is no solitary legal practice, and that further practices may be more suitable for social science.

The joint filament among entire methods of Constructivism is that they do not concentrate on an ontological truth, nonetheless in its place on created authenticity. Therefore, they cast-off uncontrollable in the least prerogatives to universalism, realism or unbiased fact, and confess that their position is just a view, a relatively intelligible method of empathetic things that has therefore outlying operated for them as a model of the world.

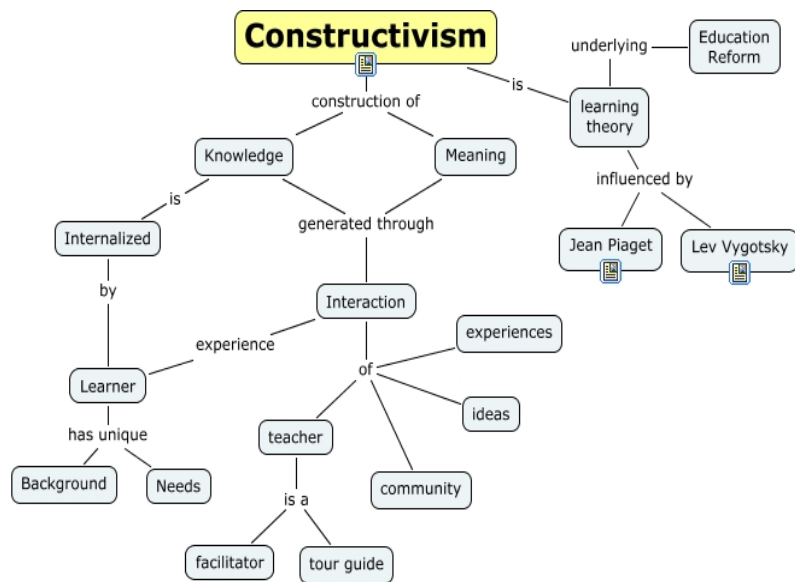


Figure 3.2: Flow Chart of Constructivism.

### **3.2. Subjective evaluation of the subject Matter:**

Typically, qualitative studies may clarify and define the experiences of human, as it involves assembling a sequence of solid, comprehensive, and drenched explanations of the facts under examination (Polkinghorne, 2005).

The key emphasis of this research is to find the best fit of the actual Shariah based facts and figures related with the sustainable financial performance of the firm. In this perspective, the research collects data via interviews from specific experts and then evaluated them in detail to understand the aggregate opinions. Being a constructivist, the research inspects and attempt to illustrate the underlying meaning and significance of collective behavior and knowledge, with contrasting interpretations, actions, and state of mind.

Nevertheless, the precise theme that the questioner desires to discover through the discussion should typically be thought about well in advance. It is usually advantageous for questioners to be equipped an interview guide, which is a casual consortium of themes and queries that the questioner can enquire in diverse ways for different contestants. Interview guides assist scholars to emphasis an interview on the themes approaching deprived of compelling them to a specific plan. This liberty can assist questioners to alter their queries as per

the situation of an interview, and to the people, they are interviewing.

A semi-structured interview is used most frequently in the social sciences. A structured interview has a demanding set of queries, which does not permit individual to distract, whereas a semi-structured interview is uncluttered, permitting novel thoughts to be brought up throughout the discussion because of what the applicant says. The questioner in a semi-structured interview usually has an agenda of themes to be discovered. Semi-structured Interviews are used to gather intensive, qualitative documented information. This technique proposes an equilibrium among the elasticity of a flexible interview and the emphasis of an organized ethnographic study.

Additionally, the subjective mode of study is commonly termed as phenomenological study. Observation through structured or semi-structured discussion is the most prominent tool used by subjective study. In formless discussions the queries arisen as a result of the conversation among the examiner and the examinee. Organized discussions comprise the full list of queries, from which assessor may not deviate. In semi-organized discussions the assessor makes a framework of the discussion matters or over-all queries, however, leaving room for the improvising.

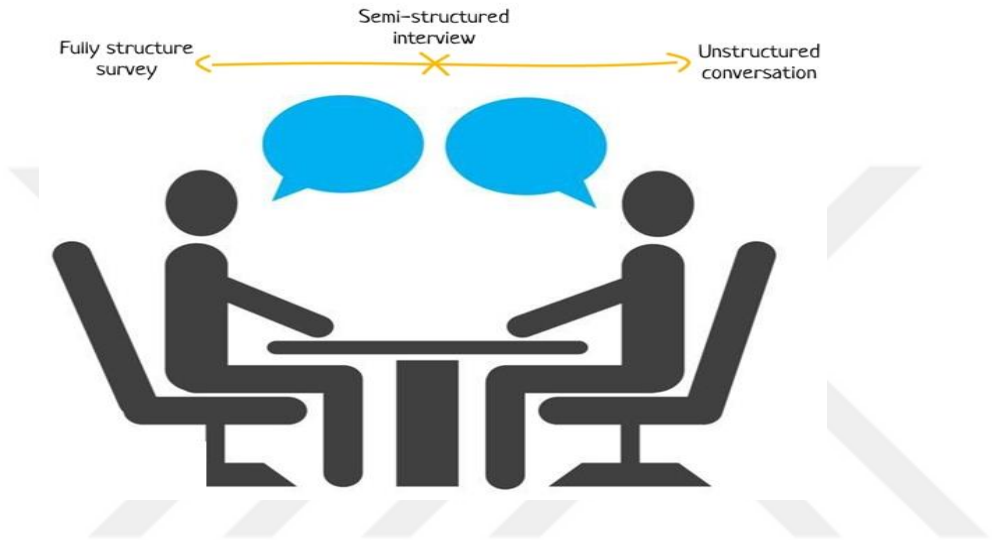


Figure 3.3: Types of Interviews.

Scholars conducted in-depth interviews in order to guide people in sharing their viewpoints on their area of interest. Interviews can be extremely organized or extra free flowing similar to chat. A personal interview is carried out with one defendant at a time. This is morally a conversational technique and requests chances to get particulars in depth from the defendant. One of the benefits of this technique offers an inordinate chance to gather detailed information regarding what individuals have faith in and what their inspirations are. If the scholar is fine expert enquiring the exact queries can assist him gather significant information.

### **3.3. Data Sample:**

As per the demand of the research question, semi structured interviews were arranged with the executives of the leading institutions indexed on the Borsa Istanbul Stock Exchange. On the basis of interviews, we collected the wide range of data from diverse point of views of experts, as interviews are considered to be the most efficient source of data gathering in constructivist type of study. They were asked candidly about the implementation of Islamic corporate governance and how did it effect the environment and performance of their firm? The questions were designed keeping in mind the diverse range of Islamic corporate governance mechanisms. The versatility of the Islamic governance domain allowed us to divert from Semi structured interviews to formless interviews in order to understand the core of the issue.

Fifty leading firms were selected, and interviews were arranged preferably with the CEOs and other top tier managers. For this study, first interview was conducted on 6th January 2020 and last interview taken on 21st February 2020. Fifty (50) face-to-face interviews were taken. Thirty-eight were male and twelve were female. The ages of the participants range from 35 to 65. All the participants had at-least master's degree along with at-least 8 years of professional experience. All the respondents made their appointment with us for the sit in interviews. On the specified date and time, three out of fifty could not make it due to the other urgency in

their domain. Out of 47 remaining, six executives did not finish their interview with us due to the time constraint or other reason. We have not considered any incomplete interview in our data analysis.

### **3.4. Overview of the questionnaire:**

The list of the questions and the complete interview is attached in the appendix. The Range of topics and the brief details about the questions covered under the questionnaire are discussed below,

#### **1. Corporate Governance Mechanism in the firm**

This is the introductory part of the questionnaire where executives were asked to define the corporate governance mechanism according to their understanding and their company's policy. This part consisted of 6 questions inquiring about the definition and any specific set of governance model rules by which firm is directed and controlled. Furthermore, information about the specific governance framework and their understanding about the Islamic Corporate governance was inquired. Lastly, ease to access to the governance principal and Company Act was questioned.

## 2. The True Nature and Purpose of the Corporation

The second part of the questionnaire consisted of four questions inquiring about the scope and the implementation of the Islamic corporate governance along with the effective and efficient mode of application.

## 3. The Islamic Role of Shareholders

This part entailed the role of shareholders in terms of application of Islamic corporate governance, interpretation of Islamic corporate governance, implications, and role of artificial intelligence in the implementation of ICG.

## 4. The Islamic based Composition and Role of Boards

In this part, the diversity, effectiveness, efficiency and accountability of board members was questioned in terms of implementation of Islamic corporate governance within the framework of organizational policies and procedures.

## 5. Selecting and Rewarding Islamic based Leaders

This part probed our interviewees about the importance of leadership skill in the board of directors as well as the employees regarding the better and effective implementation of Islamic corporate governance. It further explored about the shortcomings their organization faced during the phase of execution and

what suggestions they can come up with in terms to facilitate this process.

#### 6. Defining and Measuring ICG based Performance

This part specifically reviews about their perception of success in terms of ICG implementation and its correlation with the sustainable firm performance. It further investigated the impact of Islamic Governance based restrictions on the profitability of the company's investment portfolio and the overall market value of firm.

#### 7. Overseeing Risk and Ensuring ICG based Accountability

This last section covers the questions about the risks and accountability of board members. The responsibilities entrusted to the board members regarding the successful application of Islamic governance model resonating under the guidance provided by the Shariah supervisory board and its compliance.

### **3.5. Pre-Interview Steps:**

#### **3.5.1 Analysis of Data**

As mentioned earlier, fifty interviews were conducted from the experts of ICG, from which forty-one (41) interviews were declared fine and complete, from which we may use the data



### **3.5.3 Audited & vetted:**

Before taking interviews based on semi-structured interviews, a language experts and an expert from a regulatory authority as well, finely audited the scale and give their timely and appropriate suggestions for little improvements towards interview's reliability.

### **3.5.4 Triangulation**

According to Creswell (2003: 202), to get knowledge from various domains/multiple data sources is a good thing towards efficient data collection with high level of probability. So, for this study, data has been collected from various experts from several industries.

### **3.5.5. By Members**

To strengthen the reliability and accurateness of the data, the responses from interviews distributed to various experts of ICG for final vetting. As Creswell (2003: 195), this is the most appropriate method of validation for micro-level qualitative data.

## **Chapter 4:**

### **RESULTS ANALYSIS:**

#### **4.1. Textual Analysis of the Data:**

After completing the interviews with the experts of the leading financial institutions registered on the Istanbul Borsa Stock Exchange, their responses were recorded and after that sorted, classified, and analyzed. The thorough textual analysis of the responses generated following generic conclusions.

As per the experts of ICG:

- Corporate governance is an essential part of any business activity, its true nature may exist in the roots of Islam based on which an organization may achieve its purpose of being first in the industry.
- In Islamic corporate governance, the prime responsibility of shareholders is to be aware of any negative publicity or perceptions associated with any stereotypical clichés. Furthermore, to ensure the fairness and transparency during the course of implementation of Islamic governance practices the board of directors should be diverse in terms of its

- composition, gender unbiased, and must be accountable for any actions that fall under their jurisdiction. The roles and responsibilities should be clearly stated and delegated. There should be set criteria and models by which the success of the individual employees and implementation of specific frameworks could be measured effectually. Moreover, there must be a thorough check and balance system implemented pan across the organization which would hold accountable any party for its negligence.
- Almost all the experts agreed that despite the certain reservations, the Islamic corporate governance model is beneficial for the investors as a whole. However, many of the experts were skeptical of the way the Islamic corporate governance model has been implemented in their organization. Majority felt that there is still a long way to go in terms of coming up with the equilibrium mode of generic acceptance model for the Islamic corporate governance implementation.
- Another common ground was the acceptance of this fact that Islamic corporate governance model was much better than its contemporary conventional governance framework in terms of social benefits it allows to its stakeholders and to the society in general. This prime difference is due to the separate bases of

these two models where conventional corporate governance is based on the capitalism whereas Islamic corporate governance under the influence of Islamic laws strictly prohibits the unnecessary risk and Riba.

- As well as the role of Islamic corporate governance in the profit seeking or maximization of wealth for the shareholders is concerned, the track record of Islamic finance is excellent. Ever since the evolution and start of this Islamic corporate governance, the organizations that have opted this mechanism on average continue to grow and develop in their profit maximizing strategies.
- Another highlight of the discussion with the experts was the accountability edge, Islamic corporate governance framework offers over its counterpart. The inclusion of Islamic way of running and monitoring business is way more comprehensive and is based on this step by step delegation of the authority. Lastly, the calculated narrative emphasizes the importance of use of technology and the growing need to be able to adopt to the contemporary trends and challenges.

**Table 4.1: Comparative analysis of VMOs between IFIs and Non-IFIs**

Characteristics of Vision, Mission, and Objective (VMO)	IFIs	Non-IFIs
Foundation	Tawheed	Secularism
Motivation	Worldly and hereafter	Worldly
Orientation	Profit maximization, financial growth, continuity, and divine blessings	Profit maximization, financial growth, and continuity
Business Ethos	Business as part of faith	Business as a material need
Strategic Management	VMO of the organization is closely related to the concept of 'mankind as vicegerent of God'	VMO of the organization is based on material interest per se.
Operation Management	Every process, input and output is guaranteed Sharia'-compliant. Promoting productivity within the perimeters of Sharia' law.	No Sharia' compliant guarantee for every process, input and output. Promoting productivity only within the perimeters of self-serving interest
Financial Management	Sharia' compliant guarantee in every	No Sharia' compliant

	financial process, input and output	guarantee in every financial process, input and output.
Marketing Management	Marketing initiative is only done for Sharia'-compliant financial products.	Marketing initiative includes Sharia' noncompliant financial products

## **4.2. Summary of Interviews:**

### **4.2.1. Main Subjects: Corporate Governance:**

Corporate Governance refers to a set of organizational arrangements on how a corporation is directed, managed, governed, and controlled. It essentially involves balancing the interests of a company's shareholders, senior management executives, customers, suppliers, financiers, the government, and the community. Corporate governance practices can be labelled as the set of tools, instruments, rules, relations, processes and systems designed for the fair and efficient management of the enterprise. It manages deciding approaches to take powerful key choices. It gives extreme power and complete obligation to the Board of Directors. In the present market-arranged economy, the requirement for corporate governance emerges. Likewise, productivity just as globalization are noteworthy variables asking corporate governance. Corporate Governance is basic to create and increase the value of the partners.

According to greater part of specialists in the market, it alludes to the manner in which an enterprise is administered. It is the method by which organizations are coordinated and overseen. It implies conveying the business according to the partners' wants. It is really led by the directorate and the concerned advisory groups for the organization's partner's advantage. It is tied in with adjusting individual and cultural objectives, just as, monetary and social objectives. It manages the way the suppliers of account promise themselves of getting a reasonable profit for their speculation. Corporate Governance unmistakably recognizes the proprietors and the supervisors. The directors are the choosing authority. In present day companies, the capacities/errands of proprietors and supervisors ought to be obviously characterized, rather, orchestrating.

It straightforwardness which guarantees solid and adjusted financial advancement. This likewise guarantees the interests all things considered (dominant part just as minority investors) are defended. It guarantees that all investors completely practice their privileges and that the association completely perceives their privileges. It is the connection between different members (investors, top managerial staff, and friends' administration) in molding partnership's exhibition and the manner in which it is continuing towards. The connection between the proprietors and the directors in an association must be sound and there ought to be no contention between the

two. The proprietors must see that person's genuine exhibition is as indicated by the standard execution. These elements of corporate governance ought not be ignored.

The diversity in the governance mechanism incorporates both social and institutional viewpoints. Corporate Governance empowers a reliable, moral, just as moral condition. It is the structure of rules and practices by which a top managerial staff guarantees responsibility, decency, and straightforwardness in an organization's relationship with its all partners (agents, clients, the executives, representatives, government, and the network).

The corporate governance structure comprises of

- express and understood agreements between the organization and the partners for dissemination of obligations, rights, and rewards,
- methodology for accommodating the occasionally clashing interests of partners as per their obligations, benefits, and jobs, and
- techniques for appropriate supervision, control, and data streams to fill in as an arrangement of governing rules.

In an Islamic light the corporate governance is used in all the Islamic banks like Islamic Development Bank. Whenever any bank will operate they need a permission from state bank and when they have to open an Islamic branch as in all the Islamic

set up they as per need a permission from state bank but with that they need to take permission from AIOFI (international body) the reason behind it is that they promote Islamization in the whole world. AIOFI has settled some set of rules that either the bank is opened or a branch it should have a Sharia Advisory board and they are named as sharia auditor. This body is for the state bank as well as the other banks and an Alim would be assigned to overlook it. A committee must be created which would review conventional and Islamic banking and this difference is provided by the sharia committee. The difference between conventional and Islamic banking accounts are overviewed by the sharia advisory board.

#### **4.2.2 Role of Shareholders**

The responsibilities of the shareholders and the rule in the effective implementation and efficient enforcement office London corporate governance can be summarized as follows.

- Shareholders have the right to vote on selection of board of directors, company decisions, acquisition and mergers liquidations of company assets.
- Now in terms of ICG shareholder can add values to existing governance structure as it emphasizes the element of faith, ethics, and shariah principles by adding values inspired by taqwa (salvation) derived from the principles of Tawhid (ones of Allah).

- Essential element toward shareholders interest is electing a good shariah board who can further make sure employees' interest through fair pay, proper training, fringe benefits etc.
- Shareholder can enforce that the policies of the organization should comply with ICG.
- The role of the shareholder lies in the general policy drafting through vote in board meeting and general assembly meetings.
- Board of directors chosen on behalf of the shareholders play the vital role in the application of governance policies. Their approval of these policies and rest on the governance pave the path for its implementation and efficient enforcement.
- In Turkey all, the companies are adopting the Capital Market Board (CMB) principles of Corporate Governance. It is very clear that shareholder have the right to information. In majority of companies, they are providing the right information to the shareholder and they are following up the implications.
- Shareholders' right to true and fair information in the timely fashion refers to the obligation of the board of directors and auditors to provide such information.
- Through the transparency and accountability of ICG, shareholders are interesting in the implications of ICG. In addition, it is beneficial to many high inherent,

intrinsic risks that organizations experience but it will likely need human intervention to extrapolate its ultimate effects on the company. Utilizing all can provide a holistic picture of the risk environment.

- Implementation of Islamic corporate governance is easier in the Muslim majority countries as there is already a set up or the infrastructure for monitoring the implementation of ICG. In western societies, sometimes it's become very hard to connect all the dots and constitute the very able Shari'ah Advisory Board.
- The motivation behind these definite meetings is to build up a conversation explaining the Islamic point of view of corporate governance as an uncommon instance of a more extensive dynamic hypothesis that utilizes the reason of Islamic socio-logical epistemology. Islamic epistemology is introduced on the heavenly unity of God. The common clarification of perfect solidarity is finished by methods for explicit laws and instruments that make the Islamic epistemology practically reasonable in creating, actualizing and inducing from the use of the epistemological principles to various issues.
- A significant moral segment of any financial movement in Islam is to give equity, legit and reasonableness and to guarantee all gatherings their privileges and contribution. Islamic economy has

advanced a lot during these most recent two decades with stimulus as a significant worry in building up an Islamic corporate framework.

- After the conversation with specialists, it very well may be inferred that the component of Islamic points of view of corporate governance has more extensive skyline and can't compartmentalize the jobs and duties wherein all activities and commitments fall under the purview of the perfect law of Islam while, the OECD standards executes a firm with six diverse issue and commitments.

#### **4.2.3 Role of Management:**

Corporate governance plays a vital role in achieving the goals and objective. As the Directors are responsible and accountable for all the decisions taken on behalf of the shareholders. Usually, board has the task of reviewing and evaluating newly introduced products and services in order to ensure compliance with Shariah, and in ICG it is very clear that accountability is the main pillar. There must be a standard accountability mechanism and regular audit intervals. Yearly External audit and the continuous internal audit department must be set up to insure and find the any loophole in the organizational practices. Board of directors always need to do continuous improvement. Even as an individual its need to be

done. Few of the executives think that their organization needs a comprehensive training about ICG, and how it should be applied in organizational context. There is an extreme shortage of Islamic law and Islamic corporate finance in our organization.

Yet, just executing a corporate governance procedure is not equivalent to making progress. Most instances of good corporate governance share something practically speaking, as well: they are based on an establishment of straightforwardness, responsibility, and trust. Repeatedly, these three terms go into the corporate governance talk. They have gigantic worth, regardless of whether a business is family-run, a not-for-profit or a traded on an open market organization. That is one reason why corporate governance is top of brain for such a significant number of business experts. Most importantly, the job of corporate governance in present day associations is to show these key standards to investors, collaborates and people in general.

The validity of CEOs is at an unsurpassed low as well, with 63 percent of review respondents saying CEOs are to some degree sound or not tenable by any means. "Only 52 percent of respondents to our study said they trust business to make the wisest decision," reports Matthew Harrington, worldwide head working official of Edelman, in an outline of the study distributed by the Harvard Business Review. Nevertheless,



the running of an organization. Board may define their success on transparent strategy, achievable targets and bonuses & compensations for employees. Useful insights can also be obtained by looking at the assessable and transparent strategy, targets and key performance indicators, evaluating and reward mechanisms. The performance and the work of employees can be assessed by different models, periodic meetings, and scorecard targets.

When the companies implement ICG policy, it means the company fulfills organizational obligations as well as religious or humanistic duties. When the company provides ZAKAH to poor people and contributes social projects against poverty, this improves organizational image, which in turn contributes to company's profit. The significance of corporate governance in the present dynamic and forceful business condition cannot be denied. As per the Financial Times, it's "critical to the accomplishment of another wilderness of upper hand and productivity."

The strength and flexibility that Islamic Banking (IBs) industry has appeared during the current worldwide emergency depends on the standards of Islamic monetary laws that lay on value, cooperation, and business morals. The writing on Islamic Corporate Governance (ICG) is developing quickly and the business has risen as an option in contrast to its regular partner.

#### **4.2.5 Risk assessment and accountability of ICG:**

The main purpose behind implementation of Islam in corporate is to provide justice, honest and fairness and to ensure all the people involved in this are working with true rights and dues. The dimensions of Islamic perspectives of corporate governance has broader horizon and cannot compartmentalize the roles and responsibility in which actions and obligations fall under the jurisdiction of the divine authority of Islam. There is a high concern appear with the revenue regarding the Islamic matures of corporate governance. Their policy is to accelerate organization's development by supervising the work of directors properly. Drafting and creating sound financial policies to improve financial performance of the organization. Proper scrutiny, check and balance are the main responsibilities of the board. Consistently renovating, clear narrative, accurate objectives and testimony of outcomes are the prime responsibilities of the board.

Leaders in the company must be accountable for their decisions, actions, and performance because they have agreed to take the responsibility to lead. Accountability is the cornerstone of corporate governance in continuously monitoring best practices. From the Islamic perspective, Muslims believe that they will be accounted for whatever they do in this world and in the hereafter (life after death).

Transparency operates in such a way that it is easy for others to see what actions are performed. A corporation is responsible to a wide spectrum of stakeholders. Their goals should not strictly be driven by monetary benefits but social responsibility to the ummah. The corporate governance framework should promote transparent and efficient markets, be consistent with the rule of law and clearly articulate the division of responsibilities among supervisory board, regulatory and enforcement authorities. The board should ensure the strategic guidance of the company, the effective monitoring of management by the board, and board's accountability to the company and the shareholders.

#### **4.2.6 Current Scenario:**

A common corporate governance system of organization improves the reputation of the organization and makes it more appealing to customers, suppliers and investors, and enhances the mutual trust between shareholder and executive. Many experts said that they have opted for the internal mechanisms that are designed by the experts and approved by the Board of Governors on behalf of all the stakeholders. These set of mechanisms fall under the audit Department and are vigilantly enforced controlled and reported.



principles. Usually, the model and relevant documents are available and accessible through the links among the management, board of executive directors and the general assembly. Many executives said that the corporate governance principles been incorporated into the Company's acts and are easily available to all stakeholders.

- The board affirms incorporation of corporate governance procedures which deals with the appointment and regulation of CEOs and the issue of executive compensation. This also involves the rewards and privileges (in terms of bonuses) earned by the board of directors.
- Management creates and executes corporate methodology and works the organization's business under the board's oversight, with the objective of delivering economical long-haul recovery intended to increase to shareholders' investment.
- Management, under the oversight of the load up and its review advisory group, produces fiscal reports that genuinely present the organization's money related condition and aftereffects of tasks and makes the convenient revelations speculators need to evaluate the budgetary and business adequacy and dangers of the organization.

- The review panel of the board holds and deals with the relationship with the outside examiner, administers the organization's yearly budget summary review and inside powers over budgetary revealing, and directs the organization's hazard the executives and consistence programs.
- The choosing/corporate governance advisory group of the board assumes a position of authority in forming the corporate governance of the organization, endeavors to assemble a connected with and different board whose structure is proper considering the organization's needs and methodology, and effectively leads progression making arrangements for the board.
- The remuneration panel of the board builds up an official pay reasoning, receives and administers the execution of pay approaches that fit inside its way of thinking, structures pay bundles for the CEO and senior administration to boost the production of long haul esteem, and creates important objectives for execution based pay that help the organization's long haul esteem creation technique.
- board ought to draw in with long haul investors on issues and worries that are of broad enthusiasm to them and that influence the organization's long-haul esteem creation. Investors that connect with the board and the

executives in a way that may influence corporate dynamic or procedures are urged to uncover suitable distinguishing data and to expect some responsibility for the long haul premiums of the organization and its investors all in all. As a major aspect of this obligation, investors ought to perceive that the board should consistently weigh both present moment and long haul employments of capital while deciding how to distribute it in a manner that is generally gainful to investors and to building long haul esteem.

- In deciding, board may think about interests of entirety of organization's voting demographics, including partners, for example, representatives, clients, providers and the network in which the organization works together, while doing so contributes in immediate and important manner to building long haul esteem creation.

#### **4.2.8. Corporate Social Responsibility:**

The striking difference between Islamic corporate governance and conventional corporate governance is the emphasis on the corporate social responsibility and not only on the procedures and policies of ICG. Also, in the religion Islam, all the teachings focus on the betterment of the society and individuals living therein. This is how they differ from the

capitalist structure. In the conventional corporate governance model, rules are set in order to facilitate the maximization of shareholders wealth whereas in ICG, though the profit maximization for shareholders is given due importance but it never surpasses the ultimate goal of social development. The concept of Zakah is just one of many provisions that Islam allows. It is said to pure one's earnings. The whole ideology of it is based on the concept of sharing and avoiding unnecessary risks.

A corporation is responsible to a wide spectrum of stakeholders. Their goals should not strictly be driven by monetary benefits but social responsibility to the ummah. As such, it should disclose information regarding its policy and activities. Applying the concept of transparency, a corporation should also disclose information regarding its policy, activities undertaken, contribution to the community and the use of resources and protection of environment. While trying to limit the element of doubt in the mind of shareholders, organizations make a special effort to draw attention to their social duty in their corporate governance frameworks.

#### **4.2.9. Governance Cloud**

Board executives are committed to perform their diverse range of duties a large group of shifted obligations and duties. Persevering built up a suite of dependable administration



which, thusly, shapes the manner in which an association's heads lead, the manner in which its laborers work and how clients see the organizations with which they decide to lock in.

## **CHAPTER 5:**

### **CONCLUSION AND FURTHER REMARKS:**

#### **5.1. Concluding Remarks:**

This study presents in detail the contextual analysis and qualitative evaluation of the impact of Islamic corporate governance model on the sustainable financial development and growth of institutions. The qualitative evaluation involves semi structured interviews arranged with the top executives of the leading firms registered in the stock market of Istanbul, Turkey. This discussion with the executives of mainly financial institutions covered a wide variety of topics regarding the definition, measurement, assessment, implementation, enforcement and accountability of Islamic corporate governance framework. Moreover, the insights regarding the effectiveness of Islamic corporate governance and its constant comparison with its better half was recorded, analyzed, classified and then listed in this paper. This open and honest discussion and understanding the phenomena of Islamic corporate governance through the lens of corporate executives was very revealing and satisfying. It enabled us to better grasp the range of the activities ICG cover and how it

influences not only the individual lives but how deep an impact or mark it leaves on the society overall. Islamic ideology believes on the betterment of a whole. As a result, social betterment and cognitive development are always preferred over individual's growth of wealth. Islam believes in sharing of your privileges with the others who were not as blessed. It hates and prohibit us from any sort of discrimination, greediness and un-necessity risk taking.

Financial stability is the most important ingredient for the any business. The ultimate purpose of starting a business is to maximize the shareholders profit. Finances are one of the most problematic trials for businesses, especially for start-ups and small businesses. In fact, several businesspersons fail on the marketplace because of the lack of funds needed to support and grow their business or because of monetary restraints. Therefore, ensuring a stable financial inflow for their businesses based on proper implication of ICG model, is an important accomplishment. Moreover, the culture of the company should reflect what the company is aiming which should also be the part of their Mission Statement. However, there are various techniques to measure a business's comparative performance. The realistic goals and estimation the likelihood of attaining stated goals over diverse time periods permits managers to come up with the innovative ideas and solutions that can be key for sustaining the overall financial health of the company. A significant part of the

business strategy should be to apply ICG model properly and strengthen the financial position of the business. Customer satisfaction is most crucial factor in deciding the future of any organization. The time and energy spent in devising the detailed plans and procedures to ensure the consumers' contentment

through promotions and other marketing strategies guarantee the sustainability in the financial performance of the firm. This also buys the loyalty of the customers which is the key factor in retaining the business.

Islamic corporate governance plays particularly vital role towards the financial strength of the business, as the financial performance of the firm determines the success of business and its total performance in the market. Without ICG, a business may not achieve its financial stability in an efficient way, and deprived of a firm financial state, the business can simply fail. Moreover, financial errors can be expensive, and not just in economic terms.

Any business can definitely transpire in legal dilemmas for making a financial error, which is due to lack of implication of ICG model. These penalties can certainly collapse the whole business. That is why it is significant to put attention on implication of ICG and guarantee the business can remain active to increase the market value and earnings of firm. A high level of financial performance may result from an effective

strategy, but decent financial results let you follow strategies that necessitate considerable amount of investments in terms of time, technical skills, analytical abilities, and monetary terms too. The effective implementation of the developed strategies and framework to attain the anticipated financial outcomes, gives the flexibility to follow further planned ingenuities.

Running a business can be more worthwhile and a little less traumatic if organizations comprehend their financial conditions and how they can devise a strategy to combat with this. It will also help to be aware of the numerous performance pointers and how they volatile they can make the earnings of the firms. Feeble limitations, cash escapes, low returns and slow development can all be turned around with some time and deliberate action, which is due to poor governance model of the firm. In addition to this, generation of finances for business, through either equity or debt, is very important aspect of the business, which based on the efficient implication of ICG. A company essentially put emphasis likewise on worker assignation and client gratification. In addition, these two important things can be done through efficient corporate governance model of the firm. The implication of ICG based on efficient strategic plans. The strategic and financial outcomes are narrowly connected, and the performance in one area can influence the other.

## **5.2. Implications of the study:**

Over the previous decade, CG of IFIs has moved to become standard and is progressively pervasive in both scholastic discussions, and, for the most part, the global business media and meeting circuit. IFIs seek after two essential destinations: sound budgetary execution and moral tasks that line up with the Shariah. All the more significantly, IFIs exist to serve the requirements of the ummah. The one of a kind part of IFIs radiates from its central rule to direct and work as per the Islamic Shariah, the essential issue being the disallowance of riba (intrigue). Given this, IFIs underline on the PLS framework. In such a framework, straightforwardness issues become relevant as speculation contributors would be presented to the danger of misfortune. This comprises a center issue of IFIs to deal with the uncovered hazard that fundamentally emerge because of the nonappearance of insurance for venture investors (Erricco & Farahbaksh, 1998). As needs be, CG in IFIs is of most extreme significance. For sure, the central issue tended to in this examination is the degree that IFIs in Malaysia give CG data in their yearly reports. For the general premise, the mean score accomplished by IFIs was recorded at 51.42 percent. In light of the benchmark rule set by Mohd Ghazali and Weetman (2006), the CG data revelation in IFIs in Malaysia can be considered as "acceptable". Furthermore, the base exposure score was 42.28 percent (Standard Chartered Saadiq Berhad and OCBC Al-

Amin Bank Berhad) and the most extreme divulgence score was 68.29 percent (RHB Islamic Bank Berhad). A potential clarification for such low scores can be owing to the way that every one of the three rules were just given as of late. Along these lines, it might require some investment before IFIs really consent to the rules. Summarizing, regardless of whether the characteristic targets that portray the 'prescribed procedures' administration are not impeccably achieved at this point, CG direction in IFIs appears to combine on a pool of moral and socially dependable issues that are more extensive than that in one nonexclusive industry. This can be followed back to the fourteen measurements shrouded in the yearly reports of IFIs. As might be reviewed, D1(Board structure and working), D2 (Nominating council), D3 (Remuneration advisory group), D4 (Risk the executives panel), D5 (Audit board of trustees or Audit and administration advisory group), D7 (Risk the executives), D8 (Internal review and control; (a) general-administration data and (b) explicit administration data), D9 (Related gatherings exchange), D10 (Management report), and D11(Non-adherence to rules) were arranged towards the accomplishment of operational effectiveness to prompt an accomplishment in financial destinations, while D6 (Shariah advisory group or Shariah Supervisory board), D12 (Customers/Investment account holders), D13 (Governance panel), and D14 (Shariah consistence) broadened the direction towards the acknowledgment of moral and socially corporate

qualities through the use of organization based business standards. For the general CG divulgence of IFIs for year 2009, eight measurements are prevailing, which are:

- Risk the executive’s advisory group,
- Nominating panel,
- Remuneration council,
- Board structure and working,
- Related gatherings exchanges,
- Audit board/Audit and administration panel,
- Management reports, and
- Shariah panel/Shariah administrative board.

The normal technique of CG structure in IFIs was that they should give due thought to explicit sorts of administration measurements, which meet up to form the 'best practice' CG in the organization. The contemplations above permit this investigation to presume that at the time this examination was embraced, IFIs will in general unite on general-administration related data – progressively identified with data relating to chance administration board of trustees and selecting council. It very well may be deciphered that the significant worry for IFIs is taking care of different dangers and recruiting people with the qualifications to lead the organizations. Of less worry to IFIs is the revelation of general-administration data relating to the non-adherence to rules (9.38 percent) and data relating to the particular sort of administration data, for example, the

data identifying with Shariah consistence (28.13 percent), the particular piece of inside review and control (9.38 percent), and clients (2.63 percent). While data on administration panel was not a worry for any of the IFIs, other data, (arranged by inclination) on compensation council, board structure and working, related gatherings exchanges, review advisory group, the board reports, Shariah board of trustees/SSB and hazard the executives were agreeably unveiled by IFIs (scores more than the 50 percent limit). The arrangement of data on the general piece of interior review and control and Shariah consistence was negligible. The investigation demonstrates that IFIs appear to be in understanding about what structure ought to be set in the establishment. The constrained flexibility of explicit administration data in the yearly report of IFIs may perhaps show that this sort of data is extraordinary in yearly reports however could be unveiled through different methods (i.e., sites, handouts, and so on.). The outcomes be that as it may, ought to be deciphered considering certain restrictions. To begin with, the modest number of IFIs considered in this investigation is a restriction in itself. Future investigations should, in this manner, endeavour to incorporate IFIs in different nations. Second is the utilization of cross-sectional information that just inspected proof on designs at a specific second rather than watching the changing degrees of consistence after some time (subsequently disregarding the pattern of CG revelation over the long run). Appropriately, a

longitudinal report in future may address this. Third, everything in the CG record in this examination is accepted to have equivalent significance. Nevertheless, this may not be essentially so.

The investigation gives bits of knowledge into the CG quality in both privately claimed and remote possessed IFIs in Turkey. In the two examples, there is no necessity for an IFI to embrace proposed administration rules but then this examination discovered some proof that they do so wilfully. Furthermore, the general characteristics to which intentional administration rules are executed are impressively agreeable as it met the greater part of the things. Incipient advancement is additionally recognized on the presence of the exposure on the particular administration related data. The test before IFIs today is to improve every essential part of CG that are extraordinary to them as in the particular CG data that have proposed in this investigation. All the more explicitly, IFIs should concentrate on data relating to the Shariah panel/SSB, explicit issues on inward review and control, clients/speculation account holders, itemized data on administration boards of trustees and Shariah consistence angles. Different financial emergency regarding time have significantly delineated the calamitous outcomes spilling out of the poor corporate governance of FIs. To give a pad against these defects, there is a need to have a thorough re-assessment of CG standards of IFIs. This is significant as CG might be

viewed as a key factor in understanding the establishment and its administration. Great CG is appropriate as this will upgrade financial specialist trust in the choice taken by the chiefs and governing body of the foundation (Gandia, 2008) - even more so because of IFIs.

The staggering effect of the Great Financial Crisis was strengthened by the delinking between account and the economy, and by global monetary focuses having become a main wellspring of national salary and riches in their own right. To put it plainly, there was an excess of fund. In any case, the response since to the deceptive conduct and abundances that caused the emergency, however justifiable, may have swung excessively far the other way by depending too vigorously on rules and guidelines as opposed to tending to the basic morals. Mindful fund, by giving models to various types of account that unequivocally factor in morals, gives an elective reaction. This examination will feature the particular attributes and highlights that moral fund and Islamic account share and those that set them apart. In checking on the likenesses and evaluating future associations, this examination intends to give a firm premise to collaboration between the two kinds of fund and contribute towards a more prominent comprehension of the types of account that carry an incentive to the economy, society and nature and in this manner bolster reasonable improvement in the worldwide economy. The conjoining factors connecting moral fund and Islamic money

are their accentuation on the maintainability of ventures that help safeguarding of assets for people in the future while permitting manageable budgetary intermediation that underpins monetary development and improvement. Islamic account further reveals unnecessary influence and accentuates divulgence and straightforwardness to reinforce the lender customer connections. While moral and Islamic money both serve and increase the value of the economy, each could draw components from the other. In moral fund, the attention is on result and the effect on the economy, society and condition, with more noteworthy accentuation put on the last two. Inside Islamic money, the beginning stage has been upheld by a Shari'ah administration process that requires four primary highlights for an exchange to be admissible: that it be sponsored by genuine monetary action or resources; it is moral as in it bolsters the standards of Shari'ah; it is participatory, with dangers proportionate with returns; and it shows standards of good administration and clearness around the executing gatherings' responsibility. Connecting the comparative standards of moral and Islamic account further, there are five standards speaking to key estimations of dependable fund that incorporate

- Decency - Emphasis on reasonable treatment everything being equal

- Transparency - Clarity and revelation of all pertinent data in a way that doesn't misdirect or keep partners from settling on educated choices
- Significant benefit - Beyond productivity; guaranteeing that money is led in a way predictable with more note worthy's benefit of society
- Treatment of impermissible exercises - 'Purging' of corrupted salary from impermissible exercises is required in the two types of account
- Social measurement - Both types of account require social contemplations in professional interactions.

Evaluating these comparable standards can help advance results at the institutional level, and they can likewise add to money related solidness. Infringement of these key standards have been demonstrative of a breakdown of moral qualities, an absence of responsibility and powerless administration structures, which are every now and again key supporters of shakiness in the money related framework. The mutual shared objectives in these types of dependable money can be seen as having two arrangements of needs. The first identifies with the essential goal of achieving supportability – regarding its effect on the economy, society and natural maintainability – while simultaneously being monetarily gainful and in this manner reasonable. As the world experiences a time of incredible vulnerability in the midst of advanced disturbance and

significant environmental change, there are potential territories that moral money and Islamic account can team up in to cultivate better cooperative energies that will thusly profit the universal monetary framework. For the dependable financing industry itself there stay some critical difficulties, including the need to grow generally acknowledged principles. Islamic fund faces comparable requirements. In spite of the fact that it as of now has a worked in brought together screening process it tends to look to the Shari'ah consistence process instead of the effect of the financing action. In any case, there have been conversations around esteem including and esteem based budgetary exercises, where their effect is considered after Shari'ah decisions have been agreed to. The set-up structure can be received to accomplish the ideal social and ecological manageability results by being fused into existing administration systems. Joint effort between the dependable types of fund will yield profits by the information and experience that has been picked up in surveying the effect of such financing and ventures on the economy, society and nature. It must advance more prominent consciousness of the potential job these particular mindful types of money have in conveying a type of fund that is all around tied down to the economy and that carries an incentive to society and natural maintainability. A system of participation will be useful in articulating the expressed goal of the two types of capable money to accomplish this more noteworthy mindfulness and

empowering an evaluation of the effect of the different angles secured by each sort of capable fund. With money related changes by the worldwide network now to a great extent set up, the basic for future fund isn't just to get steady and strong yet in addition to turn into a profound grapple to its bedrock – the genuine economy – and to produce a positive advantage for the more extensive society and to ecological supportability.

### **5.3. Future Research:**

This study assessed the views of experts regarding the application of ICG in the firms and its dynamic impact on the sustainable financial growth of organizations, however, it still depends on the opinions and point of views which are subjective in nature and prone to change depending on the experience and workplace change. In this regard, we really feel the need to come up with a scientific and objective assessment to support the subjective claim. For this, index can be developed where proxies can be used to represent the ICG and sustainable financial performance.

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## **APPENDIX:**

### **Appendix A:**

#### **Islamic Corporate Governance (ICG) and Sustainable Financial Performance Questionnaire.**

##### Corporate Governance

1. In your opinion how would you define or explain Corporate Governance?
2. Corporate governance is the system of rules, practices, and processes by which a firm is directed and controlled.
3. Which is the prevailing system of Governance in your Organization?
4. As a Islamic Development Bank we are following Islamic Corporate Governance Principles
5. Has the Company adopted its own Code of Corporate Governance or has it applied another organization's Code of Corporate Governance?
6. Have the corporate governance principles been incorporated into the Company acts and are they easily available to all stakeholders?

##### The True Nature and Purpose of the Corporation

7. Is your organization focusing on Islamic Corporate Governance (ICG)? If yes, then how?
8. Do you think that you can achieve your goals in an efficient way and in easy manner as well through ICG?
9. Do you think that decision making body of your organization clearly focusing on ICG?
10. Do you think that the concept of ICG is deviating in the different corners of the world? If yes, then how and why?

#### The Islamic Role of Shareholders

11. What kind of role a shareholder can play in term of application of ICG?
12. How the shareholders may interpret the theme of ICG towards company's success?
13. How you may enhance the interest of shareholders towards implication of ICG?
14. How artificial intelligence may affect the implication of ICG?

#### The Islamic based Composition and Role of Boards

15. Do you think that your board is achieving the defined tasks in the light of ICG model?
16. Do you think that your board has an optimal balance of all the experts necessary for the Islamic culture-based success of the organization?

17. Do you think that your board needs continuous improvement in terms of its composition?
18. How your directors are accountable for their duties?

#### Selecting and Rewarding Islamic based Leaders

19. What kind of leaders you need to select for better implication of ICG?
20. Do you think that your board is performing excellent Islamic based duties for their success? If yes, then how?
21. To how much extent, your board and in-house employees are performing for ICG based success of the organization?
22. Are you satisfied with your company's executive compensation program?
23. What are the necessary attributes and skills that will be needed by business leaders of the future for successful implication of ICG model?

#### Defining and Measuring ICG based Performance

24. How your board and external members may evaluate ICG model-based success?
25. Are you focusing more on Islamic Culture based stocks as compare to the goals and objectives of your firm?
26. How your company impressing the external sources based on ICG based success?

## Overseeing Risk and Ensuring ICG based Accountability

27. What are the ICG based benchmarks of your board towards accountability?
28. What are the main policies of your board toward their responsibilities?
29. Are other parties supporting your board towards implication of ICG model?

## **Appendix B:**

### **PUBLICATION 1: ONBOARDING – THE STRATEGIC TOOL OF CORPORATE GOVERNANCE FOR ORGANIZATIONAL GROWTH**

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Source: Scopus Title List, available at [http://www.info.sciverse.com/documents/files/scopustraining/resourcelibrary/xls/title\\_list.xlsx](http://www.info.sciverse.com/documents/files/scopustraining/resourcelibrary/xls/title_list.xlsx)

# ONBOARDING – THE STRATEGIC TOOL OF CORPORATE GOVERNANCE FOR ORGANIZATIONAL GROWTH

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## **Abstract**

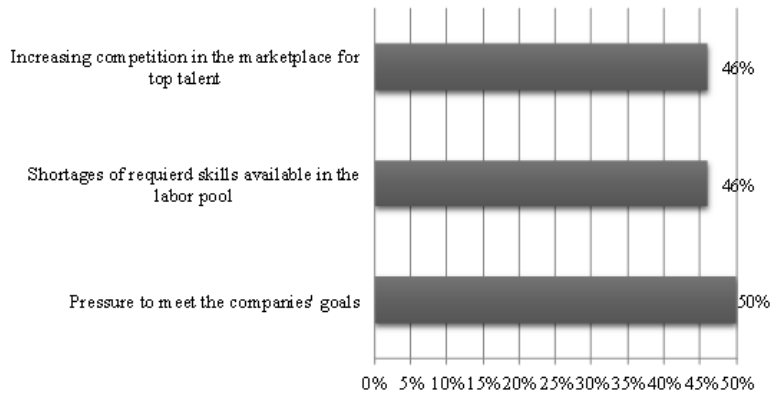
Onboarding is the management of the early stages of a relationship between an organization and a new employee and it is considered as one of the primitive and vital tools of corporate governance. If in the past it was not given much importance, at present require forward-thinking organizations. A well-designed onboarding process is related with a good work performance due to a higher job satisfaction. Effective onboarding represents the key success of an organization, so to ensure organizational growth, talent management must address of two main issues: to find qualified candidates and employee retention. The aim of the paper is to understand that the bond between a well-designed onboarding process and employee retention can assure the success of the organization.

**Keywords:** Onboarding, Human Resource, Talent Management, Organizational Growth, Corporate Governance

**JEL Classification:** *M12, M21*

## **I. INTRODUCTION**

Nowadays, companies' competitive advantage depends on the human capital due to increased complexity of jobs and globalization (Henna Karhunen, 2017). Competition for talent is in continuing increasing and is important for employers to pay attention of how they can integrate new employees and keep them productively from the beginning. Leaders must understand that the integration of new hires into organization is important for their success so, we can say that a successful onboarding is a strategic tool of any human resources management (Bauer,T.N., 2010). Companies are looking to grow, and they need the talent to support those growth goals (Mollie Lombardi, 2011). In the study made it by the Aberdeen Group in 2011 on 282 respondents, the top pressures forcing organizations to focus on onboarding are presented in the below graph.



**Figure 1 - Pressures forcing organizations to focus on onboarding (%)**

**Interpretation from Aberdeen Group, 2011**

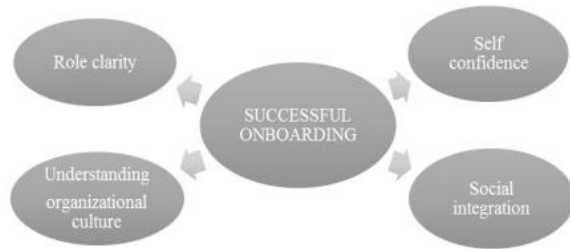
As we can see the shortage of required skills and increasing competition for the top talent have a high percent 46% which mean that companies focus their attention on the attraction and recruitment of the top talent.

Hiring and retaining employees can be very expensive (Amit Kothari, 2019) but can be and costs associated with not training them properly. The only solution is to create an onboard strategy to ensure that the employee experience is positive from day one, and the employees involve the appropriate orientation to the company culture and their proper training to meet the company's policies and objectives.

According with Mollie Lombardi (2011), the impact of standardization method for onboarding new employees will be efficient for the company. The most important objectives are:

- Better assimilation of new hires into company culture to avoid decreased team morale, productivity and absenteeism
- Bringing new productive employees to ensure healthy working relationships and networking skills
- Improve employee engagement to encourage flexibility and clarify goals

One purpose of the onboarding programs is to increase retention. In this sense companies seek to create a bond between new hires and the employees within organization. The way how new employees are integrated into the organization may have effect on their short/long term success. According with Bethany B., and Joseph T.D., (2019) only 32% of companies provide a formal onboarding experience for new employees. Researchers identified that for a successful onboarding should be took in in consideration four major levers.



**Figure 2 - The four levers of onboarding success**

***Self-confidence*** - Organizations should target specific programs on board that will help increase employee confidence (Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D. M., & Tucker, J. S. (2007).

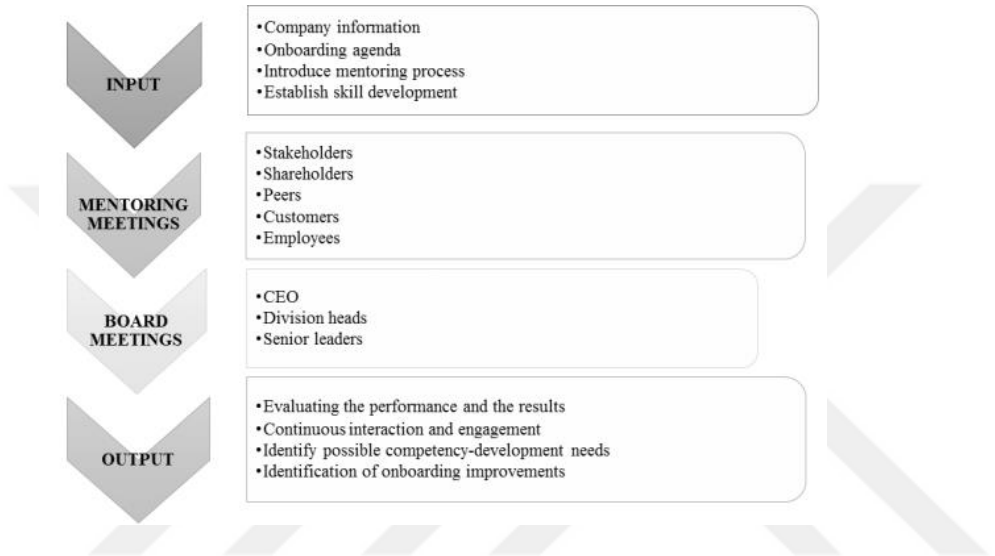
***Role clarity*** – According with Organizational Diagnostic & Development (ODD) role clarity enables performance management and ensures that all team members contribute fully in terms of their capabilities.

***Social integration*** – For an effective working relationship with their peers and superiors the new employee need to feel comfortable. A high-quality relationship with their direct supervisor is related with job satisfaction and performance. According with Puja Lalwani, (2019) insufficient leadership support and poor engagement of front-line supervisors are two areas where onboarding fails. There are evidence that 70% of

a person's satisfaction on the job comes from their relationship with their direct supervisor.

***Understanding organizational culture*** - Understanding an organization's goals and values is associated with commitment, satisfaction and low turnover (Bauer T.N., 2010).

Onboarding is related of the entrance of anyone new in an organization indifferent of the job position. If we take the case of the new directors, their successful incorporation into the organization must facilitate the fit between the company and them. Over a period of some months (6 to 9) the new directors participate in meetings with senior leaders and other heads of the departments. (Didier Cossin and José Caballero, 2019). The onboarding process is presented in the figure bellow.



**Figure 3 - The onboarding process of new directors**

Elements for new directors to consider as part of an overall onboarding framework include (KPMG, 2019):

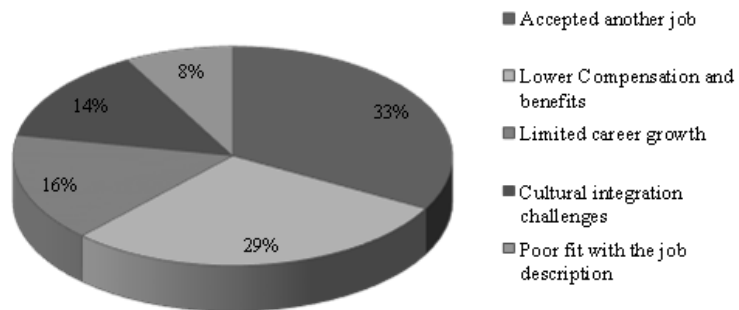
Suggested information’s including website, regulatory filings and governance documents

An initial orientation session not only with peers but also to become familiar with industry and competitor trends and risks

One-on-one meetings with important people from the organization to develop a better understanding of the business, the management process and its leaders. (North American Board Practice, 2018).

## **II. ATTRACTING QUALIFIED CANDIDATES**

Onboarding is hugely beneficial for attracting and retaining employees but attracting qualified candidates is the hardest part of recruiting process. Individual's expectations are related to motivation e.g. compensations and benefits, work conditions, relationship with direct manager and peers, professional development and communication (Isac N., and Badshah W., 2016). In the figure 4 are presented the reasons why the candidates reject a job position within organization. As we can see the most common reason is that they accept another job. For example teenagers and special, those from Generation Z don't want overloaded program. In this sense there are evidence that they quit the job from the first year. Another reasons that they reject job offers is inadequate compensation package and benefits. In a study made by Randstad US, unattractive benefits package may drive the candidates away. Challenges of cultural integration appear in general because the company onboarding systems don't explicitly support new hires in integrating, by adapting to the culture and building critical relationships (Michael D. Watkins, 2018).



**Figure 4 - Reasons of rejecting a job position**

To retain qualified candidates company must:

- Highlight the reasons why the candidate should choose his company over others because as we know the companies with similar open positions are competing for the same talent.
- Highlight the compensation, a defined path for career advancement and attractive perks. With other words to make them an offer they can't refuse.
- Proper Onboarding - Recruiter will provide information about the company starting with history, policies, culture and

ending with how the job fits into overall operations and what it's their expectations.

If we take in consideration all this we can say that the most important strategies that the company must adopt to access top talent are:

building a critical relationships with a proper integration into the company culture

improving benefits and compensations

training and development of internal employees

paying relocation expenses for top candidates

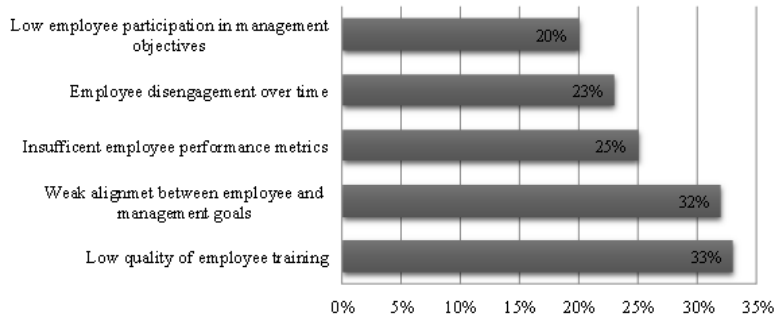
remote work arrangement

According with Arlene S. Hirsch (2017) the success of strategic onboarding is measured in terms of employee engagement and in the value that an engaged employee can eventually bring to an organization. These elements need to be aligned with the company's long-term strategy and set within a sound governance culture (International Institute for Management Development).

## **EMPLOYEE RETENTION**

Workers switch jobs several times in their careers and the companies double their efforts to acquire top talent and place people in the right roles to advance their careers and the goals

of the company. Zachary Chertok, (2018) has found that as competition for top talent rises, companies are forced to invest more in talent acquisition options than in talent management and talent sustainability options. According with (Alison Doyle, 2019) if the median tenure for workers age between 25 to 34 is 3.2 years, for workers in management, professional, and related occupations had the highest median tenure (5.5 years). When a valued employee quits, the company will face a series of disadvantages: costs to recruit and train a replacement, temporary decline in productivity and lower morale among remaining employees. Given the negative impact of turnover most organizations started to apply strategies to retain qualified employees. If the turnover is related with the permanent separation of an employee from a company the retention focus on solutions, rather than problems. The study conducted by Aberdeen in January 2018 show that organizations experience weak alignment between employee career goals and the goals of the organization, which leads to declining performance.



**Figure 5 - Reasons of performance decrease**

How can be retained employees?

The relationship between job motivation and job satisfaction are the studies most significant in organizational psychology (Isac N., et al, 2015). Compensation plays a key role in this effort but, there are and other ways to retain employees like:

Creating a Friendly Work Environment

Internal Communication

Recognizing Employee Achievements

Involving Employees in Decision Making

Career planning

For executives' career decisions, compensation plays a different role which is related with the responsibility. In this case the rewards are linked with the performance of the

company they lead. Retention of top executives is important in case of major changes in ownership or organizational structure. Losing an experimental leader may have a negative impact on the relationship that was formed with the employees, customers and suppliers. On the other side the replacement of a manager with a new one may bring fresh ideas for innovation and the success of the company, but the salaries for the executives that come from outside of the organization are much higher. Researchers' opinions vary. Some researchers found that sometimes after the departure of the organizational leaders follows a period of decline in organizational performance if is responsible for the performance of the organization but Joseph G. Rosse, (2010) in his work showed that organizational performance often increases with a new leader. Retention of key leaders is particularly problematic. In this case is used retention programs when there are particular concerns about to retain key employees. They usually target specific employees who are perceived as being at high risk of being headhunted and in this case the retention plan begin with a clear understanding of executive talent needs as well as taking stock of the skills and knowledge. To providing competitive benefits, employers can also keep staff motivated by giving them regular bonuses and other rewards tied to job performance.

## IV. CONCLUSIONS

Evidence that onboarding programs actually reduce turnover is limited but the general principles underlying onboarding programs are consistent with research on socialization which increase retention, unmet expectations, and sources of job dissatisfaction. The research showed that new employees who attended a well-structured onboarding orientation program there are more likely to remain at a company for up to 3 years and the organizations that apply onboarding process experience a greater new hire productivity and hire retention.

Businesses will require a strategy for the workplace because in a corporate environment offering professional development opportunities can increase job satisfaction of existing staff and attract new candidates. Also the retention will increase when the employees practice what they have learned. Taking in consideration all this aspects, we can conclude that an effective onboarding is a strategic process for organizations to attract and retain of the top talent because:

- Attracting depend by how organizations concentrate on exposing the organizational values, norms and social integration through a variety of activities that include social learning, mentoring, collaborative learning with peers, coaching.

- Retaining, mean at the one hand career development for new employees because at the early stage they are concentrated on learning and growth, and on the other hand for top executive the compensations and benefits.

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## **Appendix C:**

### **PUBLICATION 2: The Effect of Different Aids on Gross Domestic Product of European Union**

#### **Published in Journal:**

European Online Journal of Natural and Social Sciences

#### **Indexing:**

Indexed by Ulrich's Periodicals Directory, Index Copernicus (ICV 2018 = 95.67), Open J-Gate, Thomson Reuters (ISI), ResearchBib, JournalSeek, AcademicKeys, Electronic Journals Library (EZB), Academia.edu, Serials Solutions, OAI, Contemporary Science Association, ScienceCentral, CAS (Chemical Abstracts Service), NewJour, WorldCat, Google Scholar, ROAD.

**The Effect of Different Aids on Gross Domestic Product of European Union**

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## **Abstract:**

State aid control can encourage the design of more effective growth-enhancing policies and it can ensure that competition distortions remain limited so that the European Union (EU) internal market remains open and contestable. The objectives of this paper are exhaustive in nature. One of them is to examine the impact of different aids on GDP of EU for time period of 2005 to 2015. Another is to evaluate the proportion of different aids in a year and their cross-year analysis. To achieve the objectives, descriptive as well as inferential analysis has been used and to assess the effect of different aids on GDP of EU, the Autoregressive Distributed Lag (ARDL) Model has been used. The descriptive analysis reveals that the aid in subsidies (SUB) and tax exemptions (TAX) have the larger proportion throughout the time period. The results of ARDL model conclude that the two aids SUB and TAX having the largest proportion do not have a significant impact on EU GDP.

**Key words:** ARDL Model; European Union; GDP; State Aids; Subsidies.

**JEL Classifications:** E00, H20, H25, H84

## **1. Introduction**

In the second half of the 20th century, the nature and use of state aid underwent important transformations, as industrial policy has led to the support and promotion of strategic interest companies for national economies. (P. Bianchi și S. Labory, Empirical evidence on industrial policy using state aid data, *International Review of Applied Economics*, vol. 20, 2006, p. 603-621) In this context, trade liberalization has supported efforts to use state aid as an industrial policy tool to create "national champions" in strategic sectors for the economies of the Member States. (M. J. Trebilcock, M. Chandler și R. Howse, *Trade and Transitions: A Comparative Analysis of Adjustment Policies*, Routledge, London and New York, 1990, p. 130)

In the context of the recession that occurred with the oil crisis of 1973-1974, the economic and social context led to a redefinition of the importance and significance of the state aid policy and the possibility of using it as a positive instrument. (F. Andriessen, *The Role of Anti-Trust in the Face of Economic Recession: State Aids in the EEC*, *European Competition Law Review*, 1983, p. 340-350.) This perspective is confirmed by the possibility that State aid policy can contribute to increasing the mobility and efficiency of production factors by facilitating the process of price stabilization and moderation of inflationary pressures. On the

other hand, State aid may fuel inflationary pressures if they are designed to ensure the survival of companies or sectors unable to adapt and operate autonomously within competitive structures.

In these situations, there is a possibility that State aid will ensure a high level of immobilization of the factors of production, stimulating inflationary leverage both directly, by artificially booming budgets, and indirectly by increasing the cost in terms of tax at the level sectors or industries affected by these measures.

Given that the aid for saving jobs has seen an upward trend, the Commission has made it clear that this is only possible in situations where it is possible to make structural changes that allow the transition to modernized production forms.

Since the second half of the 1980s, the acceleration and diffusion of the effects of the phenomenon of economic integration on a global scale as well as the technological transformations that have accompanied this phenomenon favored to a significant extent the failure of the interventionist policies by this bill, causing an essential transformation of the paradigm European industrial policy. In this context, the state aid policy reflects the gradual reduction of state intervention in the structures of the economy, which overlapped with the imposition of horizontal policy instruments, in order to

structure a favorable and competitive economic environment for the entire economic and social actors of at a market level.

The European Commission has exclusive competence to declare such aid compatible with the internal market (under certain conditions, and acting unanimously, the Council may also to declare aid compatible with the internal market).

General Block Exemption Regulation - reduces the administrative burden of State aid by increasing the number of categories of State aid notified to the Commission by 26, as well as by strengthening in the form of a text and harmonizing the rules previously laid down by five different regulations. (Politica ue privind ajutoarele de stat: Regulament general de exceptare pe categorii de ajutoare, Aplicabil de la 29 august 2008 până la 31 decembrie 2013, disponibil pe [http://ec.europa.eu/competition/state\\_aid/legislation/gber\\_citizen\\_summary\\_sheet\\_ro.pdf](http://ec.europa.eu/competition/state_aid/legislation/gber_citizen_summary_sheet_ro.pdf), p. 1.)

The 26 categories of state aid will effectively benefit Europe's job creation and competitiveness. The regulation not only reduces the administrative burden for public authorities and the Commission but also encourages Member States to use scarce resources in the most efficient way.

The General Block Exemption Regulation is particularly important for small and medium-sized enterprises (SMEs) because they can benefit from all 26 measures that they are

specified in the Regulation and some measures have even been designed specifically for SMEs.

General principles of the General Block Exemption Regulation (Politica ue privind ajutoarele de stat: Regulament general de exceptare pe categorii de ajutoare, Aplicabil de la 29 august 2008 până la 31 decembrie 2013, disponibil pe [http://ec.europa.eu/competition/state\\_aid/legislation/gber\\_citizen\\_summary\\_sheet\\_ro.pdf](http://ec.europa.eu/competition/state_aid/legislation/gber_citizen_summary_sheet_ro.pdf), p. 1-2.)

To qualify for one of the 26 categories covered by the General Block Exemption Regulation, aid must fulfill certain conditions so as to guarantee that it will lead to new activities that would otherwise not have been achieved and will also promote economic development without unduly distorting competition.

When these conditions are met, aid may be granted immediately by the Member State without prior notification to the Commission. Member States only need to inform the Commission - using a simple fact sheet - and only after the aid has been granted.

The Regulation applies to "transparent" forms of aid, namely grants and interest rate subsidies, loans where the gross grant equivalent takes into account the reference rate, guarantee schemes, tax measures (capped) and certain types of advances refundable.

The General Block Exemption Regulation applies to almost all sectors of the economy, excluding fisheries and aquaculture, agriculture and parts of the coal sector. Regional aid for the steel sector, shipbuilding and synthetic fibers and regional aid targeted to specific economic sectors is also excluded. The Regulation does not apply to export-related activities or the preferential use of domestic products in relation to imported products. The General Block Exemption Regulation does not apply to ad hoc aid to large enterprises (this exclusion does not apply to regional investment aid and employment aid).

Cumulation of the various measures provided for in the General Block Exemption Regulation is possible, as long as they relate to different identifiable eligible costs. Cumulation is not allowed for overlapping or overlapping costs if such aggregation would result in exceeding the maximum admissible level applicable under the General Block Exemption Regulation.

Aid measures which have not been included in the General Block Exemption Regulation may still be authorized. However, they remain subject to the traditional notification obligation: The Commission will analyze such notifications based on existing guidelines and frameworks.

The objectives of this paper are exhaustive in nature. One of them is to examine the flow of different aids with respect to time from 2005 to 2015. Another is to evaluate the proportion

of different aids in a year and their cross-year analysis. The main objective is to study the effect of different aids on GDP of EU.

## **2. Literature Review**

The economic and financial crisis has threatened the integrity of the EU internal market and increased the potential for anticompetitive reactions; crisis has increased the demand for a greater role of the State to protect the most vulnerable members of society and promote economic recovery. Stronger and better targeted State aid control can encourage the design of more effective growth-enhancing policies and it can ensure that competition distortions remain limited so that the EU internal market remains open and contestable. It can also contribute to improving the quality of public finances (Communication from the Commission “EU Modernization of the State Aid Rules”, COM (2012) 209, issued on May 8th 2012, to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions) (Sciskalová, 2013, p. 229).

State aid must be an appropriate policy instrument to address the de-fined objective, i.e. being a selective instrument should be referred to as a last re-sort option where there are no other less distortive, general instruments (such as an increase in funding of public research and education or general fiscal

measures), which may achieve the same results; moreover, state aid must have an incentive effect, (must be capable of inducing undertakings to do things which they would not otherwise do without public support and not subsidized activities it would have carried out anyway) and finally, be proportional (a state aid measure does not fulfil this criterion when the same effect may be obtained with less aid) ( Kubera, 2016, p. 82).

The European Union's policy in the field of competition, founded on free, undistorted competition, is essential to the functioning of the internal market and is based, together with the fight against anti-competitive agreements between companies functioning within the internal market of the EU, on the prevention of the abuse of dominant position and the control of the aid provided by the state or throughout state resources (Alexe, 2017, p. 121). State aid expenditures had to be made transparent. (Atanasiu, 2001)

In addition, industrial subsidies are increasingly being directed towards horizontal measures, such as R&D and SMEs, rather than to specific sectors. The analysis has further shown that the intended target of the Commission's SAAP (the State Aid Action Plan) of less and better aid could only partially be attained. Member States have, indeed, reduced their overall intensities of state aid, albeit no redirection in the EU-15 could be observed after 2005 when the SAAP was published. In

CEECs, there has been an increase towards horizontal objectives in line with the Lisbon Strategy, even if its share in total aid is still far below the standard in the EU-15 Member States and leaves room for improvement. The example of the steel industry has also shown, that sectoral aid is still being used in both the East and West, for example, where it supports R&D measures or serves environmental protection (Hölscher et al., 2017, p. 16).

Gross domestic expenditure on R&D (% of GDP) is a headline Europe 2020 Strategy indicator. The target level is 3% of GDP to be invested in the research and development activity by the year 2020. (Paulina Kubera, 2016)

Scope-wise, state aid that is admissible in the EU can be divided into sectoral and horizontal aid. Like sectoral policies, which focus on specific industries and services, sectoral aid targets specific sectors of industry (“picking winners”), while horizontal aid is interpreted as pro-development aid for all enterprises. The second group includes categories, such as aid for employment, training, environment, small and medium-sized enterprises (SME), regional development, as well as research, development, and innovation (Ambroziak, 2016, p. 75-76).

Aid can intervene in the market mechanism and can result in significant distortions of competition. In this context, aid causes economic costs. Since they are paid from tax revenues,

they first of all represent a removal of income that is distributed to privileged branches or companies. In addition, bureaucratic costs and transaction costs on the part of the company (e.g., for aid consultation, application and reporting duties) are consequences of granting aid. In particular, the protection of a stagnant sector by the means of conservation aid takes away further funding from an economy. Moreover, aid causes undesirable side effects such as price distortions, which may lead to additional state-support payments (Haucap, 2011, p.13).

<b>Table 1: Names and Abbreviations of Different Aids</b>		
	Complete Name of the Aid	Abbreviation
1	Regional Development	RED
2	Research and Development, inclusive Innovation	RDI
3	Environmental protection and energy saving	ENV
4	Small and medium enterprises (SMEs), including venture capital	SME
5	Employment	EMP
6	Training	TRA
7	Culture	CUL
8	Export promotion and internationalization	EXP
9	Compensation for damage caused by natural disasters	COM
10	Heritage conservation	HER
11	Social support to individual consumers	SOS
12	Sectoral development	SED

13	Rescue and Restructuring	RES
14	Closure aid	CLO
15	State aid for agriculture (EUR million, at prices of previous year)	SAI
16	Subsidies	SUB
17	Easy Loans	EAL
18	Tax Exemptions	TAX

Table 1 gives the name of each aid and its abbreviation used in this paper.

Government intervention is needed to implement projects that produce general social and economic benefits, which would not have been completed without aid being granted. (European Commission Community Framework for State Aid for Research and Development And Innovation, OJ C 323/01; European Commission Framework For State Aid For Research And Development And Innovation, OJ C 198/1; E. Cohn, Theoretical foundations of industrial policy, “EIB Papers”, nr 11(1)/2006, p. 86.). The state aid to support cultural activities had existed before there was any evidence that creative industries could become an economic powerhouse that bring substantial economic benefits to the local economy (Mitkus, 2011, Mitkus & Nedzinskaite-Mitke, 2015).

In the EU all support mechanisms must comply with the European law that regulates state aid to ensure fair competition in the union (EU Regulations, 2015).

### 3. Research Methods

In this paper to achieve the objectives, descriptive as well as inferential analysis has been used. First, the behavior of different aids over the time from 2005 to 2015 have been observed via scatter diagram. Secondly, using pie chart the proportion of different aids in each year has been evaluated.

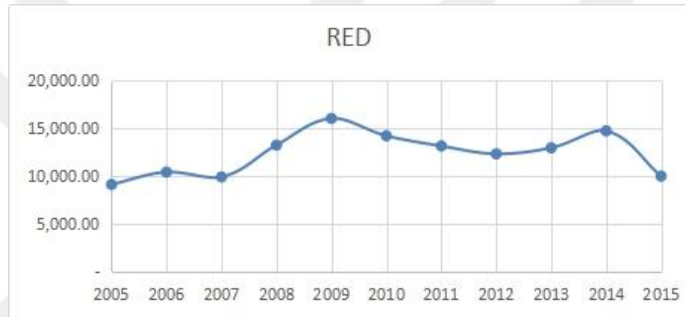
To assess the effect of different aids on GDP of EU, the Autoregressive Distributed Lag (ARDL) Model has been used as it is the robust model in presence of autocorrelated residuals. For simplicity, let there are two set of variables, one is  $Y_t$  : a vector of dependent variable and the second is  $X_t$  : a vector of independent variables, “T” representing the number of observations and “k” the number of independent variables. A general model is of the form

$$Y_t = \alpha + \sum_{i=1}^p \beta_i Y_{t-i} + \sum_{i=0}^q \theta_i X_{t-i} + \varepsilon_t \text{ -----(1)}$$

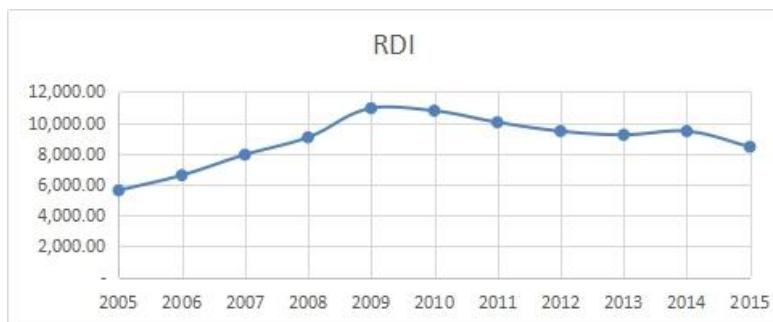
Where “p” and “q” are maximum lags of dependent and independent variables respectively and  $\varepsilon_t$  are residuals. In our analysis we have taken p=3 and q=3 and then General to

Simple Model Selection procedure has been used to select a parsimonious model.

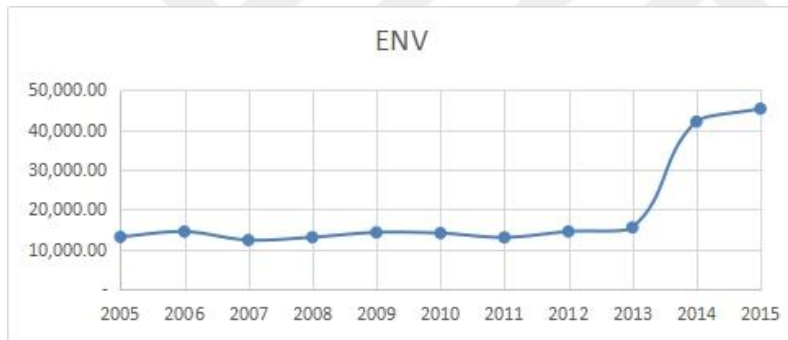
#### 4. Results, Discussion and Conclusions



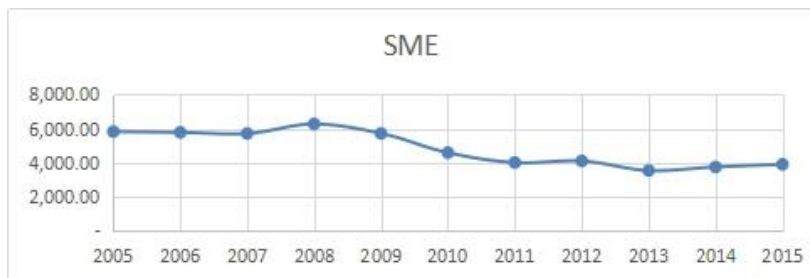
RED scatter graph shows the RED aid in 2005 was 9112, 10412 in 2006, 9901 in 2007, 13250 in 2008, 16057 in 2009, 14234 in 2010, 13160 in 2011, 12333 in 2012, 12967 in 2013, 14751 in 2014 & 9990 in 2015. RED aid started increasing after 2007 from 9901 to 16057 in 2009 at which point it decreased from 16057 in 2009 to 12333 in 2012. From 2012 to 2014 the RED aid again experienced a sharp increase from 12333 to 14751 after which it declined again to 9990 in 2015.



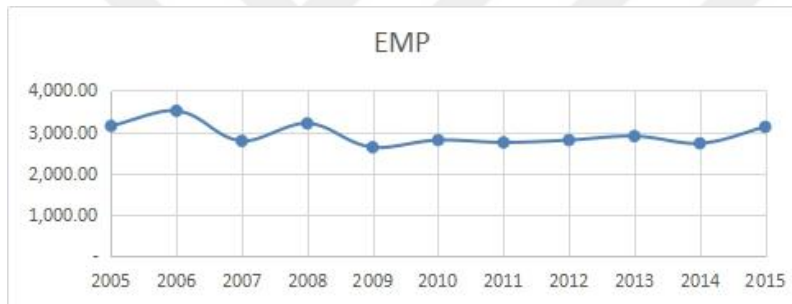
In RDI scatter graph it can be observed that RDI aid continuously increased from 5624 in 2005 to 10942 in 2009 after which it experienced a downward trend to 8449 in 2015. RDI aid in 2005 was 5623, 6605 in 2006, 7933 in 2007, 9055 in 2008, 10942 in 2009, 10781 in 2010, 10034 in 2011, 9459 in 2012, 9220 in 2013, 9457 in 2014 & 8449 in 2015.



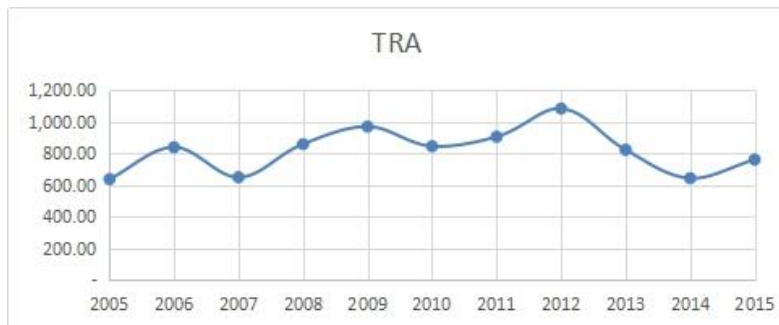
The above scatter line shows that there was not much variation in ENV aid from 2005 to 2013 but after 2013 it experienced a sharp increase from 15504 in 2013 to 42086 in 2014 & 45343 in 2015.



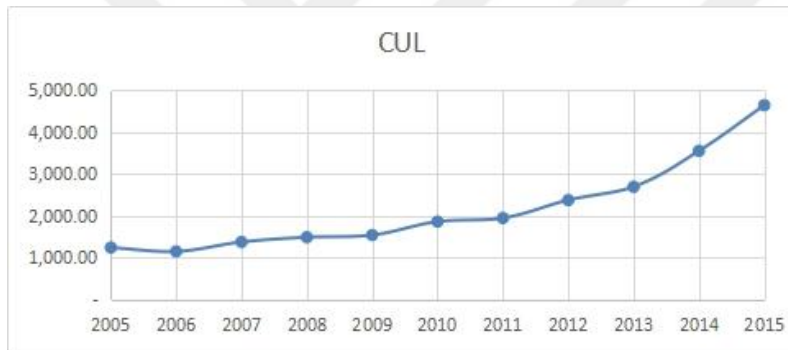
SME scatter line shows the downward trend in SME aid year after year during the time period of 2005 to 2015. SME aid in 2005 was 5830, 5784 in 2006, 5721 in 2007, 6277 in 2008, 5723 in 2009, 4593 in 2010, 4012 in 2011, 4103 2012, 3543 in 2013, 3752 in 2014 & 3905 in 2015.



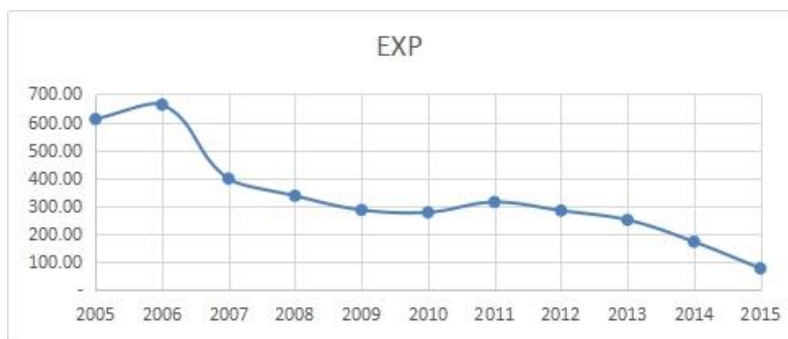
EMP aid experienced an increased variation from 2005 to 2009 after which it was roughly equal till 2014 but in 2015 it was slightly increased. EMP aid was 3145 in 2005, 3510 in 2006, 2784 in 2007, 3207 in 2008 & 2631 in 2009. From 2009 to 2014 it was static but rose again in 2015 to 3122.



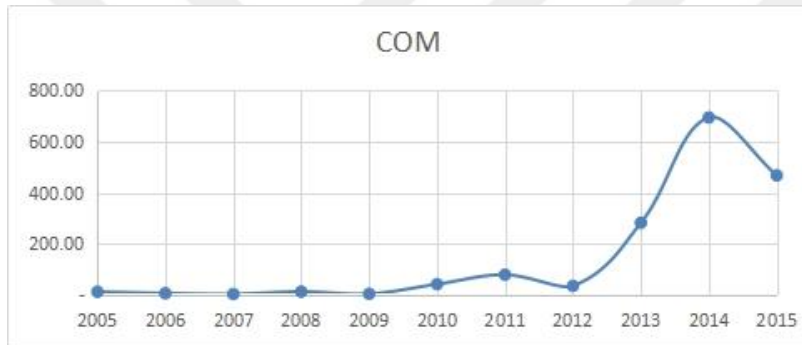
TRA aid in 2005 was 638, 840 in 2006, 650 in 2007, 860 in 2008, 971 in 2009, 847 in 2010, 906 in 2011, 1085 in 2012, 824 in 2013, 644 in 2014 & 762 in 2015. It can be observed that TRA aid experienced much variation during whole time period of 2005 to 2015.



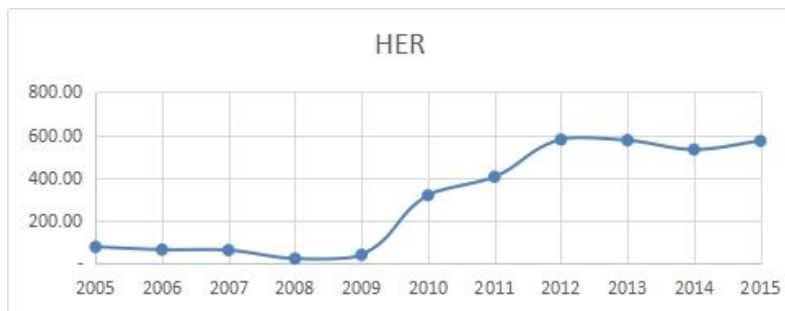
An upward trend is observed in CUL aid during the time period of 2005 to 2015. CUL aid in 2005 was 1237, 1145 in 2006, 1371 in 2007, 1485 in 2008, 1537 in 2009, 1859 in 2010, 1945 in 2011, 2375 in 2012, 2694 in 2013, 3554 in 2014 & 4647 in 2015.



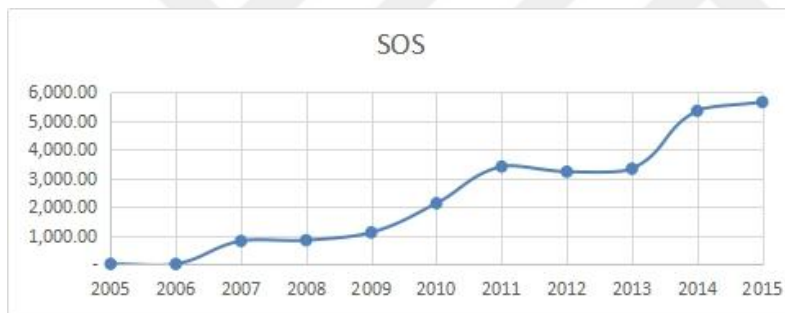
EXP aid increased from 611 in 2005 to 662 in 2006 but after 2006 it declined all the way to 2015. The EXP aid in 2007 was 398, 337 in 2008, 286 in 2009, 278 in 2010, 315 in 2011, 284 in 2012, 251 in 2013, 173 in 2014 & 74 in 2015.



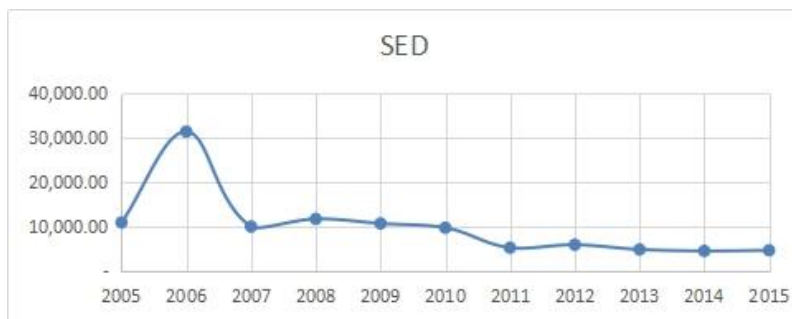
COM aid was static from 2005 & has not experienced much variation during these years but after 2009 it increased a little from 4 in 2009 to 41 in 2010 & 78 in 2011 after which it decreased again in 2012 to 35. COM aid experienced a sharp increase in 2013 & 2014 but declined again in 2015. COM aid was 282 in 2013, 695 in 2014 & 468 in 2015.



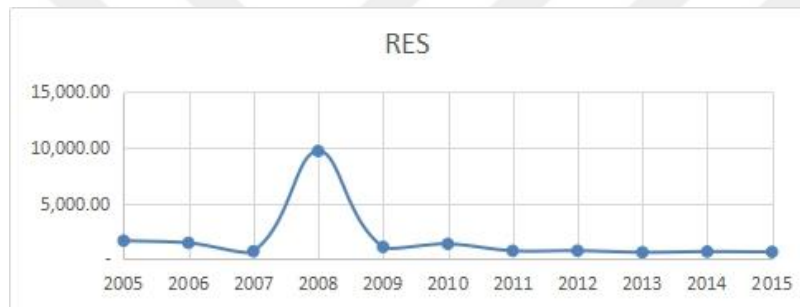
HER aid declined from 2005 to 2009 but went upwards very quickly after 2009 to 2012 after which it declined again in 2013 & 2015 to be increased again 2015. HER aid in 2005 was 77, 64 in 2006, 62 in 2007, 23 in 2008, 40 in 2009, 318 in 2010, 405 in 2011, 579 in 2012, 575 in 2013, 532 in 2014 & 573 in 2015.



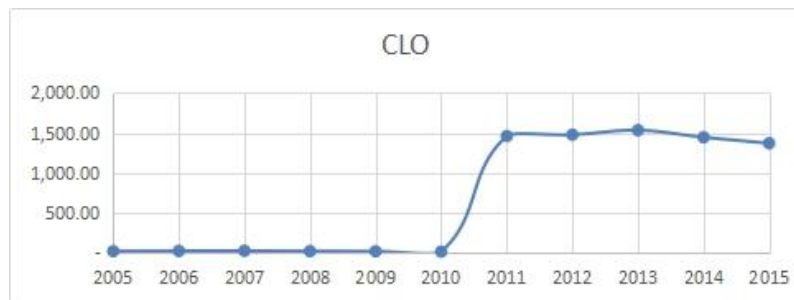
SOS aid in 2005 was 13, 9 in 2006, 811 in 2007, 839 in 2008, 1111 in 2009, 2131 in 2010, 3411 in 2011, 3232 in 2012, 3336 in 2013, 5356 in 2014 & 5663 in 2015. SOS aid decreased from 13 in 2005 to 9 in 2006 but increased in 2007 to 2011 after which it decreased in 2012 but increased again from 2012 to 2015.



The SED aid scatter graph shows that SED aid increased in 2006 from 11063 to 31507 in 2006 but decreased in 2007 to 10150 after which it slightly increased again in 2008 to 11871. After 2008 it decreased again in 2009 to 2015.



It can be observed from above scatter graph that RES aid decreased from 1631 in 2005 to 1430 in 2006 & 674 in 2007 but increased very sharply in 2008, 2009 & 2010 after which it decreased again to 2015.



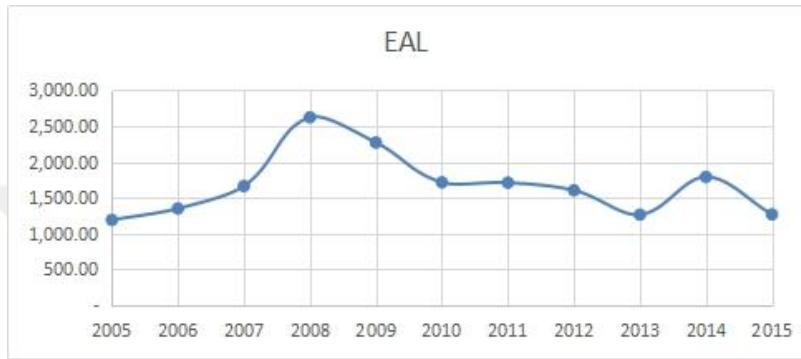
CLO aid did not experience much variation from 2005 to 2010 after which it rose up to 1461 in 2011, 1478 in 2012, 1534 in 2013, 1446 in 2014 & 1372 in 2015.



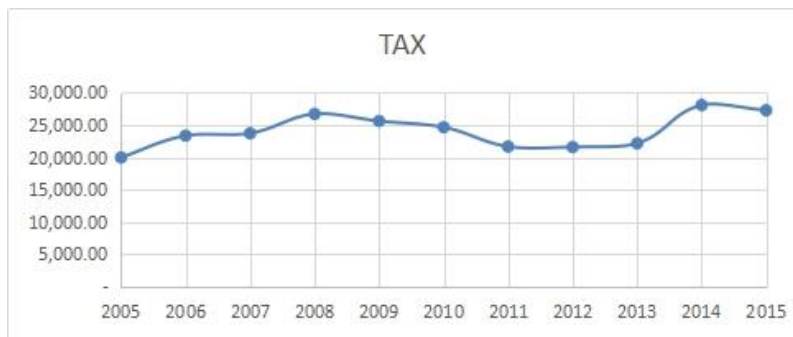
From SAI aid scatter graph, it can be observed that SAI aid increased from 2005 to 2007 but decreased from 2007 to 2009 after which it increased in 2010 & again declined from 2010 to onwards.



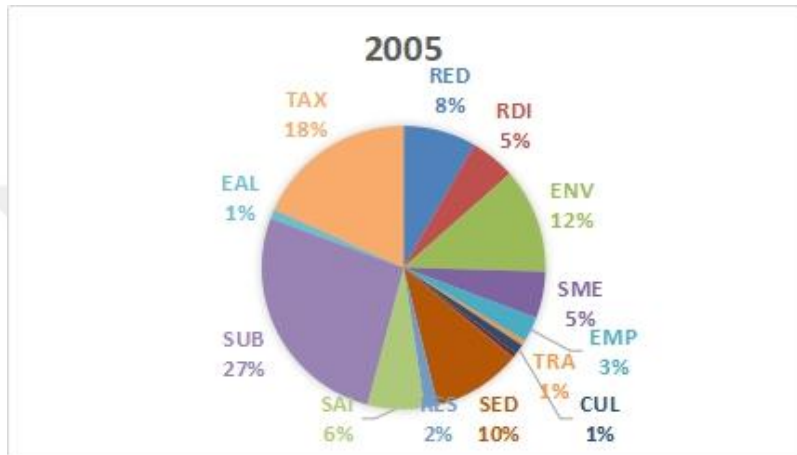
In above scatter graph SUB aid rose up in 2006 from 29037 in 2005 to 49704 in 2006 but decreased to 26527 in 2007 & increased again to 30419 in 2008 & 34186 in 2009. SUB aid was 32961 in 2010, 31104 in 2011, 32132 in 2012, 32080 in 2013, 57565 in 2014 & 57752 in 2015.



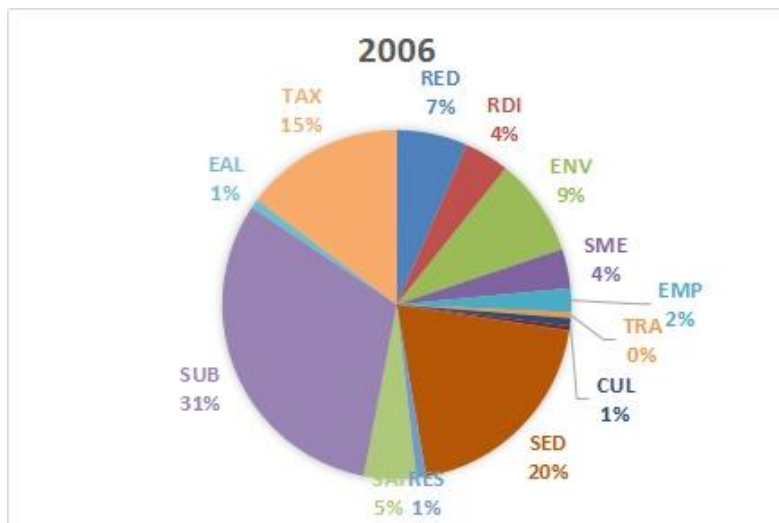
EAL aid increased from 2005 to 2008 but after 2008 it decreased all the way to 2013 & increased again in 2014 but decreased in 2015.



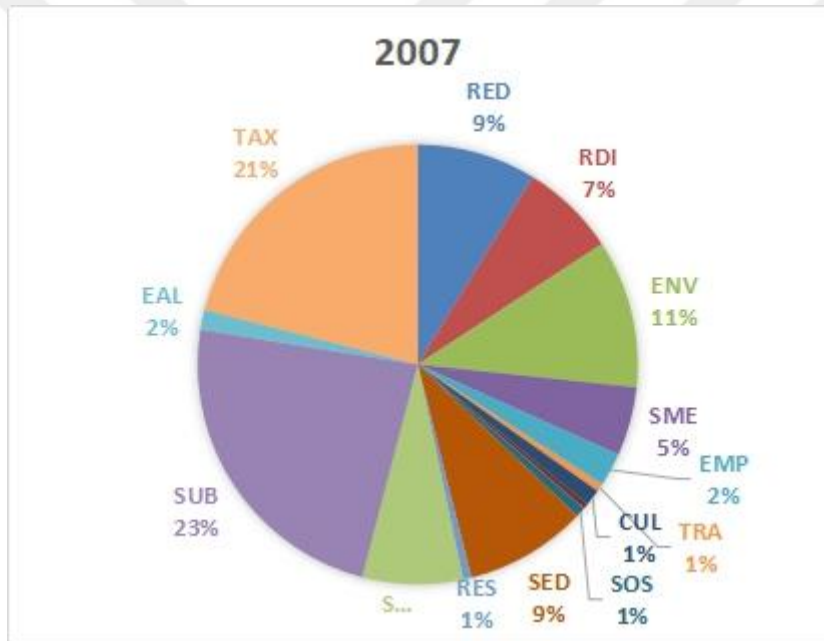
TAX aid increased from 2005 to 2008 but decreased after 2008 to 2011 & went static for next two years. In 2014 it increased again but decreased immediately in 2015.



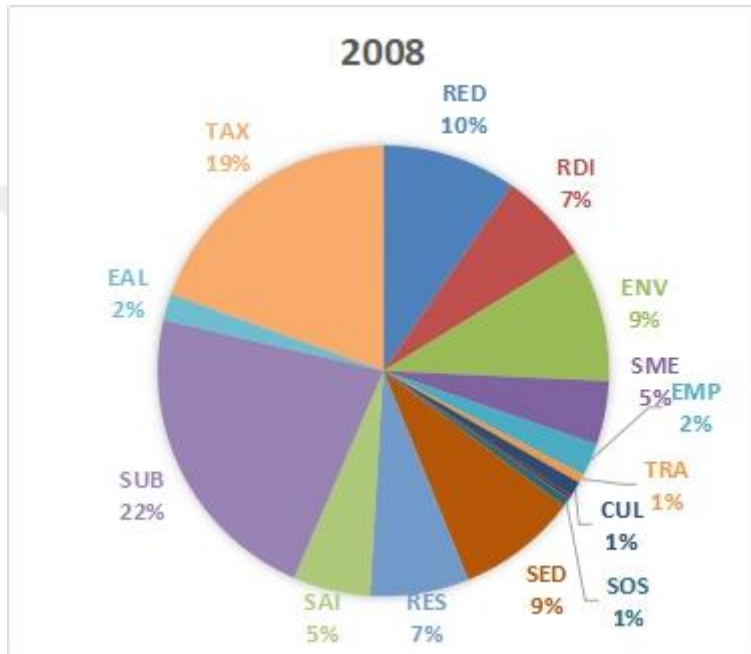
Above pie chart shows the percentage of different aid for the year 2005. SUB aid has the highest percentage of 27% during 2005. TAX is 18%, ENV 12%, SED 10%, RED 8%, SAI 6%, RDI 5%, SME 5% & EMP 3%.



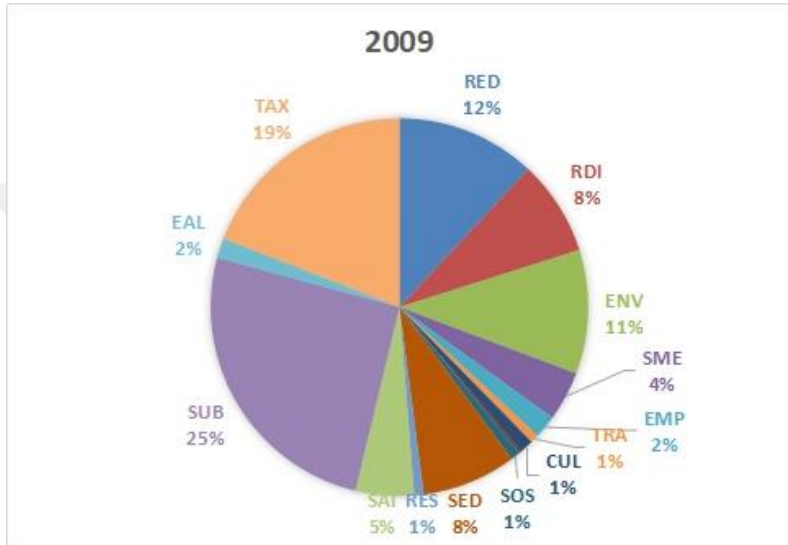
As in previous year the SUB aid has the highest percentage of 31% during 2006 then SED 20%, TAX 15%, ENV 9%, RED 7%, SAI 5%, SME 4%, RDI 4% & EMP 2%.



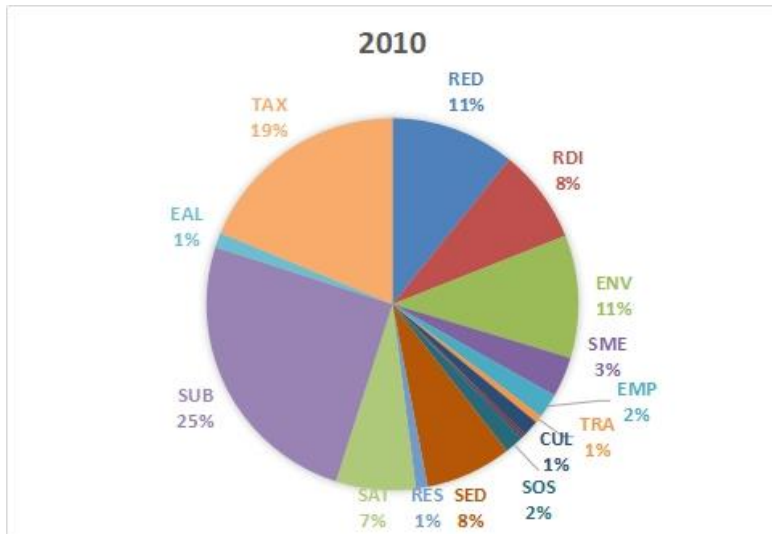
2007 pie chart shows that SUB again has the highest percentage of 23% after which TAX has 21%, ENV 11%, RED 9%, SED 9%, RDI 7%, SAI 7%, SME 5% & EMP 2%.



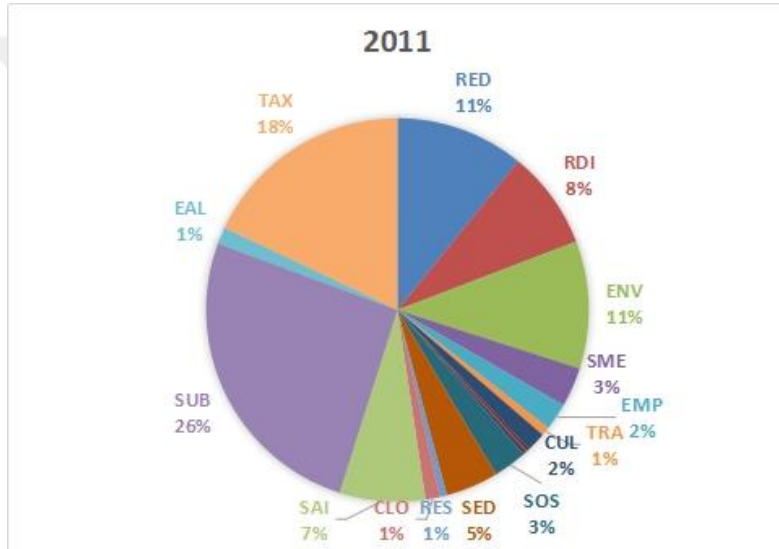
During 2008 SUB percentage is 22%, TAX 19%, RED 10%, ENV 9%, SED 9%, RDI 7%, RES 7%, SAI 6%, SME 5%, EMP 2% & EAL 2%.



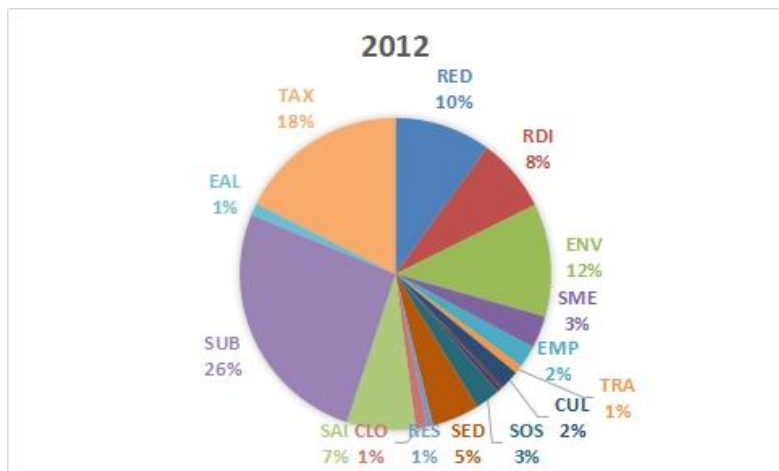
2009 pie chart shows the SUB percentage is 25%, TAX 19%, RED 12%, ENV 11%, RDI 8%, SED 8%, SAI 5%, EMP & EAL 2%.



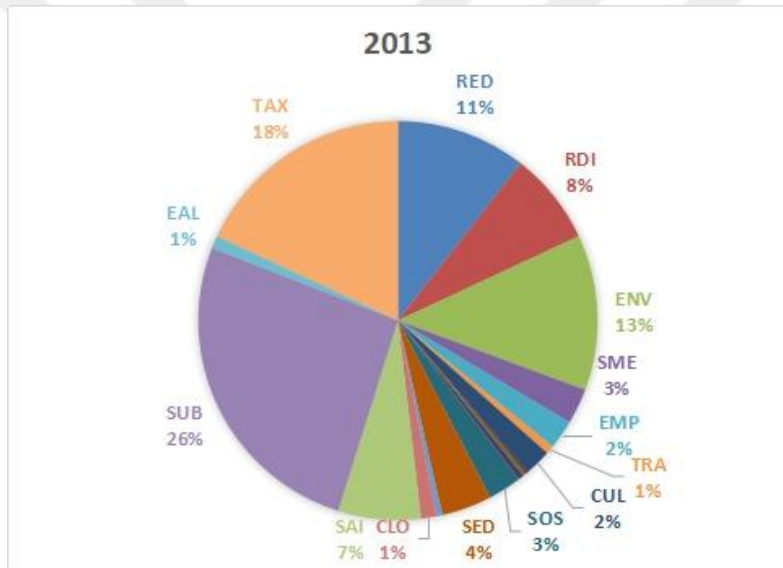
During 2010 SUB percentage is 25%, TAX 19%, ENV 11, RED 11%, RDI 8%, SED 8%, SAI 7% & SME 3%.



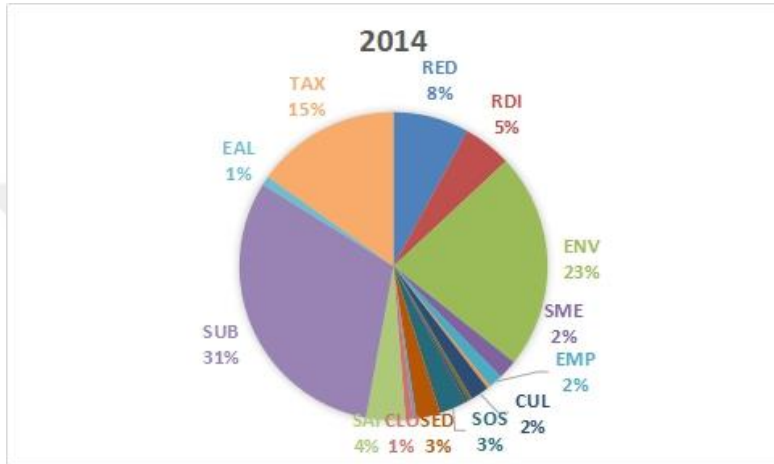
In 2011 SUB percentage is 26%, TAX 18%, ENV 11%, RED 11%, RDA 8%, SAI 7%, SED 4%, SME 3%, SOS 3% & EMP 2%.



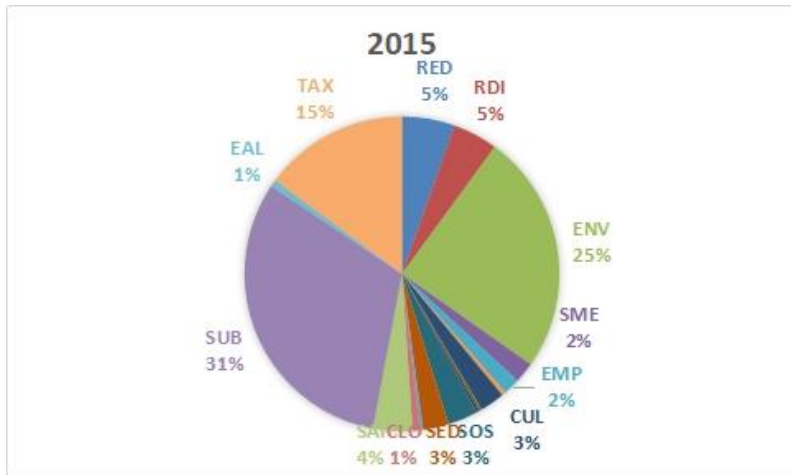
2011 pie chart shows Sub percentage is 26%, TAX 18%, ENV 12%, RED 10%, RD! 8%, SAI 7%, SED 5%, SME 3%, SOS 3%, EMP 2% & CUL 2%.



During 2013 SUB aid was 26%, TAX 18%, ENV 13%, RED 11%, RED 7%, SAI 7%, SED 4%, SOS 3%, SME 3%, EMP 2% & CUL 2%.



In 2014 SUB percentage is 31%, ENV 23%, TAX 15%, RED 8%, RDI 5%, SAI 4%, SED 3%, SOS 3%, SME 2% & CUL 2%.



SUB aid in 2015 was 31%, ENV 25%, TAX 15%, RED 5%, RDI 5%, SAI 4%, SED 3%, CUL 3%, SOS 3%, EMP 2% & SME 2%.

Effect of different aids on EU GDP has been analyzed by ARDL model separately for each aid due to smaller length of time. The results are stated in **Table 2**.

**Table 2: Effect of Different Aids on GDP of EU using ARDL Model**

Effect of RDI						
R-squared	F-statistic	C	GDP (-1)	RDI	RDI (-2)	
0.846	9.15** (0.02)	-30.24** (0.03)	-0.54** (0.04)	4.59 (0.17)	5.74** (0.01)	
Effect of RED						
R-squared	F-statistic	C	GDP (-1)	RED	RED (-2)	
0.704	3.99* (0.09)	-33.02** (0.04)	-0.28 (0.33)	4.73* (0.1)	5.48* (0.05)	
Effect of SME						
R-squared	F-statistic	C	GDP (-1)	SME	SME (-1)	SME(-2)
0.44	0.78 (0.59)	34.04 (0.10)	-0.71 (0.25)	-9.96 (0.26)	5.57 (0.57)	-1.71 (0.79)
Effect of TRA						
R-squared	F-statistic	C	GDP (-1)	TRA	TRA(-1)	

0.28	0.79 (0.54)	-3.82 (0.74)	0.02 (0.96)	4.85 (0.17)	-1.22 (0.71)	
<b>Effect of ENV</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>ENV</b>	<b>ENV(-2)</b>	<b>ENV(-3)</b>
0.96	18.48** (0.02)	4.92*** (0.003)	0.004 (0.42)	0.05** 0.04	0.23 (0.11)	0.24* (0.08)
<b>Effect of EMP</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>EMP</b>	<b>EMP(-1)</b>	
0.56	2.56 (0.15)	38.69 (0.14)	0.09 (0.77)	2.66 (0.60)	-12.01** (0.03)	
<b>Effect of CUL</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>CUL</b>	<b>CUL(-1)</b>	<b>CUL(-3)</b>
0.99	120.74*** (0.001)	6.87*** (0.00)	-0.008** (0.01)	0.07 (0.14)	0.22** (0.01)	-0.020** (0.02)
<b>Effect of EXP</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>EXP</b>	<b>EXP(-1)</b>	
0.74	5.80** (0.033)	16.30*** (0.001)	-0.21 (0.35)	3.04** (0.03)	-6.07*** (0.008)	
<b>Effect of COM</b>						

<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>COM(-1)</b>	<b>COM(-3)</b>	
0.90	13.00** (0.015)	7.13*** (0.000)	-0.007 (0.27)	-0.023** (0.019)	0.004 (0.59)	
<b>Effect of HER</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>HER(-1)</b>	<b>HER(-3)</b>	
0.80	5.33* (0.07)	7.04*** (0.000)	0.001 (0.82)	0.016 (0.16)	0.022* (0.08)	
<b>Effect of SOS</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>SOS</b>	<b>SOS(-3)</b>	
0.81	5.73* (0.06)	6.78*** (0.000)	-0.013 (0.18)	0.14** (0.04)	-0.023 (0.15)	
<b>Effect of SED</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>SED(-1)</b>	<b>SED(-2)</b>	
0.79	6.56** (0.03)	7.48 (0.29)	0.38 (0.40)	-2.91*** (0.009)	2.08 (0.17)	
<b>Effect of RES</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>RES</b>	<b>RES(-1)</b>	<b>RES(-2)</b>
0.76	3.18 (0.14)	-52.59** (0.04)	6.05** (0.02)	10.93** (0.025)	-2.16** (0.03)	-2.75** (0.03)
<b>Effect of CLO</b>						

<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>CLO(-1)</b>	<b>CLO(-3)</b>	
0.87	9.01** (0.029)	7.08*** 0.000	-0.0005 (0.92)	-0.009* (0.09)	0.014** (0.04)	
<b>Effect of SAI</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>SAI</b>	<b>SAI(-1)</b>	<b>SAI(-3)</b>
0.45	0.328 (0.86)	5.74 (0.12)	0.002 (0.11)	-0.087 (0.76)	0.128 (0.66)	0.197 (0.52)
<b>Effect of SUB</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>SUB</b>	<b>SUB(-1)</b>	<b>SUB(-3)</b>
0.31	3.21 (0.18)	6.27*** (0.0007)	-0.0024 (0.78)	0.104 (0.16)	0.08 (0.34)	0.0007 (0.92)
<b>Effect of EAL</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>EAL</b>	<b>EAL(-2)</b>	<b>EAL(-3)</b>
0.53	3.94 (0.14)	7.76*** (0.0001)	0.007 (0.55)	-0.07 (0.30)	-0.15* (0.07)	0.023 (0.71)
<b>Effect of TAX</b>						
<b>R-squared</b>	<b>F-statistic</b>	<b>C</b>	<b>GDP(-1)</b>	<b>TAX</b>	<b>TAX(-1)</b>	<b>TAX(-3)</b>
0.47	0.80 (0.64)	11.42 (0.27)	0.02 (0.58)	-0.29 (0.75)	0.11 (0.71)	-0.48 (0.72)

Note: \*\*\*, \*\* and \* show significance at 1%, 5% and 10% level respectively.

### **Effect of RDI**

As the value of R-squared is 0.846 so it means that 84.6% of variations in GDP are explained by the above regressors i.e. C (constant), lag of GDP (GDP(-1)), RDI and 2nd lag of RDI (RDI(-2)). Furthermore, the Prob(F-statistic) is 0.018 (less than .05), so it means that the model is a good fit at 5% level of significance. As the p-value of RDI is 0.1742 which is greater than 0.1 so it means that RDI has an insignificant impact on GDP. However, as p-value of RDI(-2) is 0.0126 which is less than .05 so it means that two years back aid on RDI has a significant impact on current GDP at 5% level of significance.

### **Effect of RED**

As the value of R-squared is 0.70 so it means that 70.4% of variations in GDP are explained by the above regressors i.e. C (constant), lag of GDP (GDP(-1)), RED and 2nd lag of RED(RED(-2)). Furthermore, the Prob(F-statistic) is 0.09 (less than 0.1), so it means that the model is a good fit at 10% level of significance. As the p-value of RED is 0.10 which is greater than 0.1 so it means that RED has an insignificant impact on GDP. However, as p-value of RED(-2) is 0.05 which is less than .10 so it means that two years back aid on RED has a significant impact on current GDP at 10% level of significance.

### **Effect of SME**

A low value of R-squared (0.44) and insignificant F stats indicate that SME has no significant impact on GDP of EU. These measures also point out that model is not a good fit and other better models may be used for this purpose.

### **Effect of TRA**

A low value of R-squared (0.28) and insignificant F stats indicate that TRA has no significant impact on GDP of EU. These measures also point out that model is not a good fit and other better models may be used for this purpose.

### **Effect of ENV**

As the value of R-squared is 0.96 so it means that 96% of variations in GDP are explained by the above regressors i.e. C (constant), lag of GDP (GDP (-1)), ENV and 2nd lag of ENV (ENV (-2)). Furthermore, the Prob(F-statistic) is 0.02 (less than 0.05), so it means that the model is a good fit at 5% level of significance. As the p-value of ENV is 0.04 which is less than 0.05 so it means that RED has a significant impact on GDP at 5% level of significance. However, as p-value of ENV(-3) is 0.08 which is less than .10 so it means that three years back aid on ENV has a significant impact on current GDP at 10% level of significance.

### **Effect of EMP**

A low value of R-squared (0.56) and insignificant F stats indicate that EMP has no significant impact on GDP of EU. These measures also point out that model is not a good fit and other better models may be used for this purpose.

### **Effect of CUL**

As the value of R-squared is 0.99 so it means that 99% of variations in GDP are explained by the above regressors i.e. C (constant), lag of GDP (GDP (-1)), CUL, 1st lag of CUL(CUL (-1)) and 3rd lag of CUL(CUL (-3)). Furthermore, the Prob(F-statistic) is 0.001 (less than 0.01), so it means that the model is a good fit at 1% level of significance. As the p-value of CUL is 0.14 which is greater than 0.10 so it means that CUL has an insignificant impact on GDP. However, as p-value of CUL(-1) is 0.01 which is less than .05 so it means that one year back aid on CUL has a significant impact on current GDP at 5% level of significance and as p-value of CUL(-3) is .02 which is less than .05 so it means that three years back aid on CUL has a significant impact on current GDP at 5% level of significance.

### **Effect of EXP**

A high value of R-squared (0.74) shows that 74% of variations in EU GDP has been explained by the independent variables.

As F stats is significant at 5% so the model is a good fit. The constant is significant at 1% level as it has p-value of 0.001. EXP has significant impact on EU GDP as both its level and lags are significant having p-values 0.03 and 0.008.

### **Effect of COM**

As the value of R-squared is 0.90 so it means that 90% of variations in GDP are explained by the above regressors i.e. C (constant), lag of GDP (GDP (-1)), COM, 1st lag of COM(COM (-1)) and 3rd lag of COM(COM (-3)). Furthermore, the Prob(F-statistic) is 0.015 (less than 0.05), so it means that the model is a good fit at 5% level of significance. As the p-value of COM is 0.27 which is greater than 0.10 so it means that COM has an insignificant impact on GDP. However, as p-value of COM(-1) is 0.019 which is less than .05 so it means that one year back aid on COM has a significant impact on current GDP at 5% level of significance and as p-value of CUL(-3) is .59 which is greater than .10 so it means that COM(-3) has an insignificant impact on GDP.

### **Effect of HER**

As the value of R-squared is 0.90 so it means that 90% of variations in GDP are explained by the above regressors i.e. C (constant), lag of GDP (GDP (-1)), 1st lag of HER(HER (-1))

and 3rd lag of HER(HER (-3)). Furthermore, the Prob(F-statistic) is 0.07 (less than 0.10), so it means that the model is a good fit at 10% level of significance. As the p-value of HER(-1) is 0.16 which is greater than 0.10 so it means that HER(-1) has an insignificant impact on GDP. However, as p-value of CUL(-3) is .08 which is less than .10 so it means that three years back aid on HER has a significant impact on current GDP at 10% level of significance.

### **Effect of SOS**

As the value of R-squared is 0.81 so it means that 90% of variations in GDP are explained by the above regressors i.e. C (constant), lag of GDP (GDP (-1)), SOS and 3rd lag of SOS(SOS (-3)). Furthermore, the Prob(F-statistic) is 0.06 (less than 0.10), so it means that the model is a good fit at 10% level of significance. As the p-value of SOS is 0.04 which is less than 0.05 so it means that SOS has a significant impact on GDP at 5% level of significance However, as p-value of SOS(-3) is .15 which is less than .1.0 so it means that has an insignificant impact on GDP

### **Effect of SED**

A high value of R-squared (0.79) shows that 79% of variations in EU GDP has been explained by the independent variables.

As F stats is significant at 5% so the model is a good fit. The constant is insignificant as it has p-value of 0.29. SED(-1) has significant impact on EU GDP as it has a p-value of 0.009.

### **Effect of RES**

A high value of R-squared (0.76) shows that 76% of variations in EU GDP has been explained by the independent variables. The constant is significant at 5% level as it has p-value of 0.04. RES has significant impact on EU GDP as both its level and lags are significant having p-values 0.025, 0.03 and 0.03.

### **Effect of CLO**

As the value of R-squared is 0.87 so it means that 87% of variations in GDP are explained by the above regressors i.e. C (constant), lag of GDP (GDP (-1)), 1st lag of CLO(CLO (-1)) and 3rd lag of CLO(CLO (-3)). Furthermore, the Prob(F-statistic) is 0.02 (less than 0.05), so it means that the model is a good fit at 5% level of significance. As the p-value of CLO(-1) is 0.09 which is less than .10 so it means that one year back aid on CLO has a significant impact on current GDP at 10% level of significance and as p-value of CUL(-3) is .08 which is also less than .10 so it means that three years back aid on HER has a significant impact on current GDP at 10% level of significance.

### **Effect of SAI**

A low value of R-squared (0.45) and insignificant F stats indicate that SAI has no significant impact on GDP of EU. These measures also point out that model is not a good fit and other better models may be used for this purpose.

### **Effect of SUB**

A low value of R-squared (0.31) and insignificant F stats indicate that SUB has no significant impact on GDP of EU. These measures also point out that model is not a good fit and other better models may be used for this purpose.

### **Effect of EAL**

A low value of R-squared (0.53) and insignificant F stats indicate that EAL has no significant impact on GDP of EU. These measures also point out that model is not a good fit and other better models may be used for this purpose.

### **Effect of TAX**

A low value of R-squared (0.47) and insignificant F stats indicate that TAX has no significant impact on GDP of EU. These measures also point out that model is not a good fit and other better models may be used for this purpose.

## **Conclusions and Recommendations**

The scatter diagrams show that different aids tend to increase with time with varying rates. The pie charts show that SUB has the largest proportion of aid throughout from year 2005 to 2015. The second larger proportion is of TAX, the third is of SED, the fourth is of ENV, the fifth and sixth are of RED and RDI. The inferential analysis shows that the two aids having larger proportion i.e. SUB and TAX do not have a significant impact on EU GDP. However, the remaining four aids i.e. SED, ENV, RED and RDI having collectively a larger proportion throughout the years 2005 to 2015 have significant impact on EU GDP. Therefore, it is recommended that proportion of these four aids i.e. SED, ENV, RED and RDI may be increased to ensure an increase in production.

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## **Appendix D:**

### **PUBLICATION 3: Model Selection Procedures in Bounds Test of Cointegration: Theoretical Comparison and Empirical Evidence**

#### **Published in Journal:**

Economies

#### **Indexing & Abstracting**

ABDC - Australian Business Deans Council [external link](#)

Academic Journal Guide (CABS - Chartered Association of  
Business Schools) [external link](#)

DOAJ - Directory of Open Access Journals [external link](#)

EconBiz / ECONIS (Leibniz Information Centre for  
Economics - ZBW) [external link](#)

EconLit (American Economic Association) [external link](#)

EconPapers (RePEc) [external link](#)

Emerging Sources Citation Index - Web of Science (Clarivate  
Analytics) [external link](#)

Genamics JournalSeek [external link](#)

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Norwegian Register for Scientific Journals, Series and Publishers (NSD)[external link](#)

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## **Model Selection Procedures in Bounds Test of Cointegration: Theoretical Comparison and Empirical Evidence**

**Abstract:** Only unstructured single-path model selection techniques, i.e., Information Criteria, are used by Bounds test of cointegration for model selection. The aim of this paper is twofold; one is to evaluate the performance of these five routinely used information criteria (AIC, AICC, BIC, BICC, and HQC) and three structured approaches (Forward Selection, Backward Elimination, and Stepwise) by assessing their size and power properties at different sample sizes based on Monte Carlo simulations, and second is the assessment of the same based on real economic data. The second aim is achieved by the evaluation of the long-run relationship between three pairs of macroeconomic variables, i.e. (Energy Consumption and GDP), (Oil Price and GDP), and (Broad Money and GDP) for BRICS countries using Bounds cointegration test. It is found that information criteria and structured procedures have the same powers for a sample size of 50 or greater. However, BICC and Stepwise are better at small sample sizes. In the light of simulation and real data results, a modified Bounds test with Stepwise model selection procedure may be used as it is strongly theoretically supported and avoids noise in the model selection process.

**Keywords:** Bounds Cointegration Test; Information Criterion; Model Selection Techniques; Plausible Model

**JEL Classification:** C22, E00, F00, R00

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## **1. Introduction**

The concept of avoiding the spurious regression in case the time series under consideration are  $I(1)$  was firstly explored by Engle & Granger (1987) in their seminal paper. They argued that spurious cointegration could be avoided if the  $I(1)$  time series are cointegrated, i.e., having a long-run relationship. Following their paper, numerous tests were developed, and empirical studies were carried out to find the long-run relationship between time series. Since the development of the first cointegration test, various cointegration tests have been developed, and one of them is the Bounds cointegration test developed by Pesaran, Shin et al. (2001). Since the development of the Bounds test of cointegration by Pesaran, Shin et al. (2001), it has been widely and frequently used by researchers to examine the level relationship between different macroeconomic and financial variables (Adeleye et al. 2018; Tsoulfidis and Tsaliki 2014; Tang 2014).

The information criteria / unstructured model selection procedures are used by the Bounds test of cointegration for plausible model selection. The five unstructured procedures, commonly known as information criteria are Akaike Information Criterion (AIC) developed by Akaike (1973), Akaike Information Criterion Corrected (AICC) formulated by Hurvich & Tsai (1989), Bayesian or Schwarz Information Criterion (BIC or SIC) developed by Schwarz (1978),

Bayesian or Schwarz Information Criterion Corrected (BICC or SICC) developed by McQuarrie & Tsai (1998) and an information criterion proposed by Hannan & Quinn (1979) generally abbreviated as HQC. These criteria were developed for the lag selection in different testing approaches. In addition to these information criteria, there are other model selection procedures such as Forward Selection (FS), Backward Elimination (BW) and Stepwise (SW) Regression, which can be used for plausible model selection. These three model selection procedures are known as single path structured procedures which were developed by Efroymson (1960) and are routinely used in SPSS and STATA for plausible model selection.

Bounds cointegration test has some additional features as compared to its single equation rivals as it is based on an Error Correction form of the equation, and it doesn't require pre-testing for unit root. Furthermore, if cointegration is found, then the same error correction form serves as the famous error correction model, and if it is not found, then it is a simple autoregressive model in difference of the variables. Therefore, for the Bounds cointegration test, it is not a simple problem of lag selection, it is a very vital and crucial problem of model selection as the same model will be used for policy implications.

The performance of these model selection techniques have been assessed in numerous studies; however, one should note that the performance of these model selection techniques has yet not been evaluated for Bounds test. Moreover, single path procedures' performance has also not been assessed for the Bounds test so far. However, scholars have frequently and widely applied the Bounds test to explore the level relationship between several financial and macroeconomic series.

Therefore, it is worth exploring the efficiency and assessing the performance of the different techniques and procedures which can be used by Bounds test for selecting a plausible model. This paper, therefore, fills the existing vacuum in the literature by finding an appropriate model selection technique from these eight model selection procedures by investigating their size and power properties on the basis of Monte Carlo simulations. Furthermore, this study also assesses the behavior of these model selection procedures by evaluating of the existence of cointegration between different macroeconomic variables for BRICS (Brazil, Russia, India, China, and South Africa) member countries. Moreover, as the Bounds test has not been used for cross country comparison of level relationship in the literature for BRICS, so a cross country comparison is also carried out, based on the existence of long-run relationships between different macroeconomic variables for BRICS economies.

These cross country or cross regions comparisons have been carried out in literature in several studies like Sari (2015), Mayor & Patuelli (2015), Delbecq, Guillain et al. (2013), and many more. We consider three different pairs of variables, i.e. (Energy Consumption (EC) and Gross Domestic Product (GDP)), (Oil Price (OP) and GDP), and (Broad Money (BM) and GDP), to ensure the robustness of our findings.

The rest of the paper is structured as follows. The next section presents the literature review, tracked by methodology; Section 4 presents the empirical results, and Section 5 concludes the article.

## **2. Literature Review:**

Some of the studies assessing the long-run relationship between time series after the development of cointegration include: Long-run performance of Slovenia apple markets illustrates an almost perfect price transmission along the marketing chain with an elasticity close to unity. Economic theory generally explains this as an indicator of market productivity (Hassouneh, Serra, and Bojnec 2015). The price-level variations mainly favor retailers by increasing their marketing margins. Increases in international wheat stocks reduce producer prices, while higher interest rates boost their instability (Hassouneh et al. 2017).

A spatial price transmission is analyzed from several perspectives, using a variety of econometric techniques to shed light upon the degree of integration, adjustment asymmetries, and the role of market share upon price transmission. A linear and non-linear Vector Error Correction (VEC) model were found to be capable of adequately depicting the long-run wheat producer price relationship between Hungary and Slovenia (Bakucs, Bojnec, and Fert\Ho 2015). The cointegration relation implies a common stochastic trend of variables, which are modelled in the empirical analysis. Inflation rate and hospitality industry prices are found to be integrated of order one with a nonzero mean, suggesting that the present level of costs can be composed as a sum of all the previous shocks to inflation and hospitality industry prices. The general price level influences hospitality industry prices in the short run, but less in the long-term equilibrium price relation in the dynamic specifications (Gričar and Bojnec 2013).

The eight model selection approaches along with other approaches were compared using Monte Carlo simulations and real data in numerous studies such as Hoover & Perez (1999), Hendry & Krolzig (1999), Kudo & Sklansky (2000), Castle, Doornik et al. (2011) and many more having mix conclusions. For a detailed survey of the comparison of model selection techniques, please read Rashid (2014). Rashid (2014) concluded that stepwise regression performs better than the rest of the single path and unstructured model selection

techniques. Moreover, Rashid (2014) also showed that for small sample sizes, AIC is the second better performer, and BIC is the second better performer at large sample sizes.

The existence of a long-run relationship between EC and GDP has been explored in numerous studies like Shahbaz, Zakaria et al. (2018), Belke, Dobnik et al. (2011), Mehrara (2007) and many more. Similarly, the relationship between OP and GDP has been explored in a number of studies like Foudeh (2017), Ghalayini (2011), Du, Yanan et al. (2010), and many more. A lot of studies have explored the dynamics between BM and GDP, such as Denbel, Ayen et al. (2016), Ogunmuyiwa & Ekone (2010), Lin & Yunhui (2005) but not restricted to these. The panel cointegration analysis and cointegration regression using Fully Modified Ordinary Least Squares (FMOLS) and Dynamic Ordinary Least Squares (DOLS), for 31 OECD (Organization for Economic Cooperation and Development) countries covering time span 1990–2016. It shows that there is strong bi-directional causality between variables. The energy consumption elasticities of high technology exports are comparatively high than medium and low-tech export (Şanlı, D. (2019).

The causality tests disclose that (1) unidirectional causality running from energy consumption to real GDP in Egypt, Iran, Lebanon, and Tunisia; (2) unidirectional causality running

from real GDP to energy consumption in Algeria, Morocco, and Saudi Arabia; (3) bidirectional causality in Oman and the United Arab Emirates; and (4) no causality between energy consumption and real GDP in Bahrain and Malta. These conclusions suggest that energy conservation policies can be implemented in Algeria, Bahrain, Malta, Morocco, and Saudi Arabia (Ozturk 2017). The magnitude of the coefficient estimates of Natural Gas Consumption (NGC) becomes substantially smaller in the long-run, and the sign of short-run estimates of NGC shifts to negative after accounting for capital and labor as well. The direction of causality between growth rate (GR) and NGC using the vector error correction model Granger causality approach and reveal the evidence of feedback hypothesis for Turkey (Dogan 2015).

The higher oil prices transform income from oil importing countries to oil-exporting countries. So, increases in oil prices have a negative impact on the economy of oil importers. Moreover, it has a significant impact on economic growth. Trade openness also has a positive and significant impact on economic output. Long-run results indicate that the coefficient of government investment has a positive and significant impact on growth. Long-run and short-run dynamics between variables respectively using annual data from 1972-2011 in the context of Pakistan. Through examining the results, the long run and dynamic relationship have detected for all the variables except industrial oil

consumption, and oil price variables for the model have no short-run impact on GDP. Oil prices impacting real GDP negatively in the long run but positively in the short-run (Nazir and Qayyum 2014).

The Oil Prices have no vital impact on the most variables during the short term, with the exception that they have a positive effect on inflation and negative effect on the real effective exchange rate. The result of Variance Decomposition analysis (VD) is consistent with the Impulse Response Function (IRF) in that there is a Positive Impact in Long-term of Oil Prices on the real GDP (RGDP) and inflation (INF). On the other hand, there is a Negative Impact on the real effective exchange rate (REER) and unemployment rate (UNE), with no effect at all on Money supply (M2) (Bouchaour and Al-Zeaud 2012).

### **3. Methodology**

The details of the Bounds Cointegration test and model selection procedures are laid out. The data generating process (DGP) and the details of data sources with their description are also given.

### 3.1. Bounds Test of Cointegration:

The Bounds test of cointegration uses the following form of the Error Correction Model (ECM hereafter)

$$\Delta y_t = c_0 + c_1 t + \phi(\pi_0 + \pi_1 t + \alpha y_{t-1} + \beta X_{t-1}) + \sum_{i=1}^p \gamma_i \Delta y_{t-i} + \sum_{i=0}^q \delta_i \Delta X_{t-i} + \varepsilon_t \quad (3.1)$$

$y_t$  is a  $T \times 1$  vector of endogenous/dependent variable,  $X_t$  is a  $T \times k$  vector of  $k$  regressors, i.e.  $(x_{1t}, x_{2t}, \dots, x_{kt})$ ,  $\varepsilon_t$  is a  $T \times 1$  vector of random errors &  $p$  and  $q$  is the maximum number of lags of  $Y$  and  $X$ , respectively. The parameters of interest are  $c_0$  the un-restricted intercept,  $c_1$  the un-restricted linear time trend,  $\pi_0$  the restricted intercept, and  $\pi_1$  the restricted linear time trend. Pesaran, Shin et al. (2001) considered the following five different models i.e.

**Model-1:** No intercepts, No trends: In ECM (1)  $c_0 = c_1 = \pi_0 = \pi_1 = 0$  and it becomes

$$\Delta y_t = \phi(\alpha y_{t-1} + \beta X_{t-1}) + \sum_{i=1}^p \gamma_i \Delta y_{t-i} + \sum_{i=0}^q \delta_i \Delta X_{t-i} + \varepsilon_t \quad \text{-----}$$

-- (3.2)

**Model-2:** Restricted intercept, No trends: In ECM (1)  $c_0 = c_1 = \pi_1 = 0$  and it becomes

$$\Delta y_t = \phi(\pi_0 + \alpha y_{t-1} + \beta X_{t-1}) + \sum_{i=1}^p \gamma_i \Delta y_{t-i} + \sum_{i=0}^p \delta_i \Delta X_{t-i} + \varepsilon_t \text{ -----}$$

-- (3.3)

**Model-3: Un-restricted intercept, No trends:** In ECM (1)

$c_1 = \pi_0 = \pi_1 = 0$  and it becomes

$$\Delta y_t = c_0 + \phi(\alpha y_{t-1} + \beta X_{t-1}) + \sum_{i=1}^p \gamma_i \Delta y_{t-i} + \sum_{i=0}^p \delta_i \Delta X_{t-i} + \varepsilon_t \text{ -----}$$

--- (3.4)

**Model-4: Un-restricted intercept, Restricted trends:** In ECM

(1)  $c_1 = \pi_0 = 0$  and it becomes

$$\Delta y_t = c_0 + \phi(\pi_1 t + \alpha y_{t-1} + \beta X_{t-1}) + \sum_{i=1}^p \gamma_i \Delta y_{t-i} + \sum_{i=0}^p \delta_i \Delta X_{t-i} + \varepsilon_t$$

-- (3.5)

**Model-5: Un-restricted intercept, Un-restricted trend:** In ECM

(1)  $\pi_0 = \pi_1 = 0$  and it becomes

$$\Delta y_t = c_0 + c_1 t + \phi(\alpha y_{t-1} + \beta X_{t-1}) + \sum_{i=1}^p \gamma_i \Delta y_{t-i} + \sum_{i=0}^p \delta_i \Delta X_{t-i} + \varepsilon_t \text{ -}$$

----(3.6)

For the testing of the existence of a long-run relationship, the null hypothesis of no cointegration i.e.

$H_0: \varphi = 0$  (No Long run relationship)

Is tested against the alternative hypothesis of cointegration i.e.

$H_A: \varphi \neq 0$  (Long run relationship exists)

(Pesaran, Shin, and Smith 2001) used the standard  $F - test$  for linear restrictions to test  $H_0$  i.e.

$$F = \frac{(RSSR - RSSU)/q}{RSSU/(T - k)}$$

Where  $RSSR$  is the Residual Sum of Squares for Restricted Regression,  $RSSU$  is the Residual Sum of Squares for Unrestricted Regression,  $q$  is the number of restrictions and  $k$  is the total number of parameters estimated. Two critical values of  $F - stat$  were obtained; one was named as lower bound, denoted as  $F_{LB}$  and it was the  $100(1 - \alpha)th$  percentile of  $F$  when  $X_t$  are generated as  $I(0)$  i.e. integrated of order zero. The other as named as upper bound denoted as  $F_{UB}$  and it was the  $100(1 - \alpha)th$  percentile of  $F$  when  $X_t$  are generated as  $I(1)$  i.e. integrated of order one. The  $\alpha$  is the assumed significance level. The null hypothesis of no cointegration is rejected when  $F \geq F_{UB}$  and it is concluded that there is a long run relationship between  $y_t$  and  $X_t$ . If  $F \leq F_{LB}$ , then it is concluded that there is no long run relationship between  $y_t$  and  $X_t$ . However, if  $F_{LB} < F < F_{UB}$ , then it is concluded that the test is inconclusive.

For the selection of a plausible model, the following eight model selection procedures are used belonging to two types of structured and unstructured model selection procedures.

**Structured Model Selection Procedures:**

These procedures and algorithms use Several Linear Regression models and their conclusions for the selection of a plausible and parsimonious model from a set of candidate variables. These algorithms were first developed by (Efroymsen 1960) and are routinely used by social scientists. The details of these three algorithms are:

**Forward Selection (FS) Procedure:**

It is a unidirectional algorithm that first estimates the model with no candidate variable, and then it estimates the linear regression model for all candidate variables separately one by one. Let  $Y$  be the dependent variable,  $X_i$  for  $i = 1, 2, 3, \dots, k$  be  $k$  independent variables,  $\beta_i$  for  $i = 1, 2, 3, \dots, k$  be  $k$  respective regression coefficients, and  $\varepsilon$  be the random error then FS algorithm estimates  $k$  linear regressions i.e.

$$Y = X_i\beta_i + \varepsilon \quad \forall k = 1, 2, 3, \dots, k$$

The independent variable having the minimum significant p-value or maximum significant t-stat is chosen. Then this

variable is maintained in the model throughout the further selection technique. In the next step, again  $k - 1$  linear regressions are estimated, and another most significant variable is chosen from remaining  $k - 1$  candidate variables. This process is continued until either there is no significant variable to be included or all variables have been included.

### **Backward Elimination (BW) Procedure:**

It is also a unidirectional algorithm that first estimates the most general multiple linear regression model was having all the candidate variables. Say,  $Y$  be the  $(T \times 1)$  vector of the dependent variable,  $X$  be  $(T \times k)$  matrix of independent variables,  $\beta$  be  $(k \times 1)$  vector of respective regression coefficients and  $\varepsilon$  be the  $(T \times 1)$  vector of random errors then BW algorithm estimates the multiple linear regression model:

$$Y = X\beta + \varepsilon$$

In this estimated model, the independent variable, either having the maximum insignificant p-value or minimum insignificant t-stat, is dropped, and the model is reduced to  $k - 1$  regressors. Again, the same procedure is adopted for the remaining  $k - 1$  regressors, and another variable is dropped, and the model is reduced to  $k - 2$  regressors. This procedure continues until either there is no insignificant variable to be dropped or all of the variables have been dropped.

### **Stepwise (SW) Regression Procedure:**

There are two algorithms, i.e., Stepwise with Forward Selection and Stepwise with Backward Elimination, whose details are:

#### **Stepwise with Forward Selection:**

It is a bi-directional selection algorithm, which uses both forward selection and backward Elimination for plausible and parsimonious model selection. Let, take the same model as it is in forward selection .i.e., let  $Y$  be the dependent variable,  $X_i$  for  $i = 1, 2, 3, \dots, k$  be  $k$  independent variables,  $\beta_i$  for  $i = 1, 2, 3, \dots, k$  be  $k$  respective regression coefficients, and  $\varepsilon$  be the random error. Then for the first two steps, the forward selection is used to select two variables .i.e., FS algorithm estimates  $k$  linear regressions separately

$$Y = X_i\beta_i + \varepsilon \quad \forall k = 1, 2, 3, \dots, k$$

The independent variable having the minimum significant p-value or maximum significant t-stat is chosen as the valid first regressor. Then this variable is retained in the model for the second step selection procedure. In the second step, again  $k - 1$  separate linear regressions are estimated, and another most significant variable is chosen from remaining  $k - 1$  candidate variables as the second valid regressor. Then

backward Elimination is run on these two selected valid regressors by FS to drop the variable, which is insignificant in the model if there is any. In the third step again, forward selection is used to select another valid variable if it is significant, and then again, backward Elimination is used to drop the insignificant regressors. This process continues until all the candidate regressors are accounted for.

### **Stepwise with Backward Elimination:**

In this algorithm for the first two steps, Backward Elimination is used to drop two most insignificant variables, and then in the Forward Selection is used to check whether the two dropped variables may or may not be included again. In the third step again, Backward Elimination is used to drop another most insignificant variable (if any), and then again Forward Selection is used. This process continues until a parsimonious model is obtained.

### **Unstructured Model Selection Procedures:**

These methods are generally known as Information Criteria in Statistics and Econometrics. These are non-parametric methods, which calculate the information lost by imposing penalties. The models having the minimum value of these information criteria are selected as the most plausible and

parsimonious model. The general procedure of all these methods is the same; however, they differ in penalty. The general form is

$$IC = c \cdot \ln(\sigma^2) + Penalty$$

Where  $c$  is a constant,  $\sigma^2$  is the estimated error variance, and *Penalty* is a function which differs with type.

In order to implement the information criteria for model selection, first, all possible models are estimated, and for each model, information criteria are calculated. Then the model having the minimum information criteria are selected as the most plausible model. If there are  $k$  candidate variables, then there will be  $(2^k - 1)$  possible models, and all these models are to be estimated. So, if there are a large number of candidate variables say  $k = 15$ , then there will be  $(2^{15} - 1 = 32767)$  possible models to be estimated, which is a massive task. For all information criteria, let there are  $k$  candidate variables,  $l$  is the value of the log-likelihood function of the estimated model,  $T$  is the total number of observations and  $\sigma^2$  is the estimated variance of the model. The five information criteria's performance is assessed in this paper and their details are:

### **Akaike Information Criterion (AIC):**

It was developed by (Akaike 1973), and it is a measure of goodness of fit of the model. It is given as

$$AIC = \ln(\sigma^2) + 2(k + 1)/T$$

Its likelihood form is

$$AIC = -2l + 2k$$

**Akaike Information Criterion Corrected (AICC):**

This criterion is a modification of AIC, modified by (Hurvich and Tsai 1989). It is given as

$$AICC = \ln(\sigma^2) + (T + k + 1)/(T - k - 3)$$

Its likelihood form is

$$AIC = -2(l/T) + 2(k/T)$$

**Bayesian Information Criterion (BIC):**

BIC was developed by (Schwarz 1978), also known as Schwarz Information Criterion (SIC) in literature. Analytically it is given as

$$BIC = \ln(\sigma^2) + (k + 1). \ln(T)/T$$

Its likelihood form is

$$BIC = -2l + k. \ln(T)$$

### **Bayesian Information Criterion Corrected (BICC):**

BICC is a modification of BIC and modified by (McQuarrie and Tsai 1998). BICC is also known as Schwarz Information Criterion Corrected (SICC). It is given as

$$BICC = \ln(\sigma^2) + (k + 1). \ln(T)/(T - k - 3)$$

Its likelihood form is

$$BIC = -2(l/T) + k. \ln(T)/T$$

### **Hannan-Quinn Information Criterion (HQC):**

HQC was developed by (Hannan and Quinn 1979). It is given as

$$HQC = \ln(\sigma^2) + 2k. \ln(\ln (T))$$

Its likelihood form is

$$HQC = -2(l/T) + 2k. \ln(\ln (T))/T$$

### **Data Generating Process (DGP):**

The ECM specified in equation (3.1) has been used as DGP. However,  $X$  is a single regressor in our DGP and being generated as a random walk without drift and trend. The performance of model selection procedures is free of nuisance parameters (a different set of values of nuisance parameters

were taken, and it was observed that they don't affect the size or power), so their values are set to 1, i.e.

$$c_0 = c_1 = \pi_0 = \pi_1 = \alpha = \beta = 1$$

Under the null hypothesis of no cointegration  $\varphi = 0$  and under the alternative hypothesis of cointegration  $\varphi = \{0.005, 0.008, 0.011\}$  have been considered.

### **Basis of Monte Carlo Comparison:**

Eight model selection procedures have been compared on the basis of size and power using Monte Carlo Simulations. The size and power are defined as

$$\textit{Size} = \textit{Probability (Rejection of } H_0 / H_0 \textit{ is True)}$$

$$\textit{Power} = \textit{Probability (Rejection of } H_0 / H_0 \textit{ is False)}$$

50,000 simulation has been carried out for estimation of size and power.

### **Data description and source:**

In our empirical analysis, we used the data for BRICS (Brazil, Russia, India, China, and South Africa) member countries. We considered these countries because BRICS is one of the essential alliances of five nations, and these are five rapidly emerging economies representing four different continents (Lissovlik and Vinokurov 2019; Huang and Osborne 2017).

Three pairs of variables have been considered to assess the cointegration among them, and these are {Energy Consumption (EC hereafter) and Gross Domestic Product (GDP hereafter)}, {Oil Price (OP hereafter) and GDP} and {Broad Money (BM hereafter) and GDP}. The annual data for three considered pairs of macroeconomic variables of BRICS member countries have been taken from WDI (World Bank's online data source). The data covers the period from 1990 to 2017. Data of "GDP per Capita in current US\$" for each of the BRICS members is taken as GDP for the first two pairs, and "GDP in Current Local Currency Unit (LCU)" has been taken as GDP for the third pair as BM is also in LCU. The data of "Energy use (Kg of oil equivalent per Capita)" has been taken as Energy Consumption (EC), and "Cushing, OK WTI Spot Price FOB (US\$ per Barrel)" are taken as Oil Prices (OP).

#### **4. Results and Discussion**

To evaluate the relative performance of all eight model selection procedures, the findings of Monte Carlo experiments are discussed first and then the findings of real data are discussed.

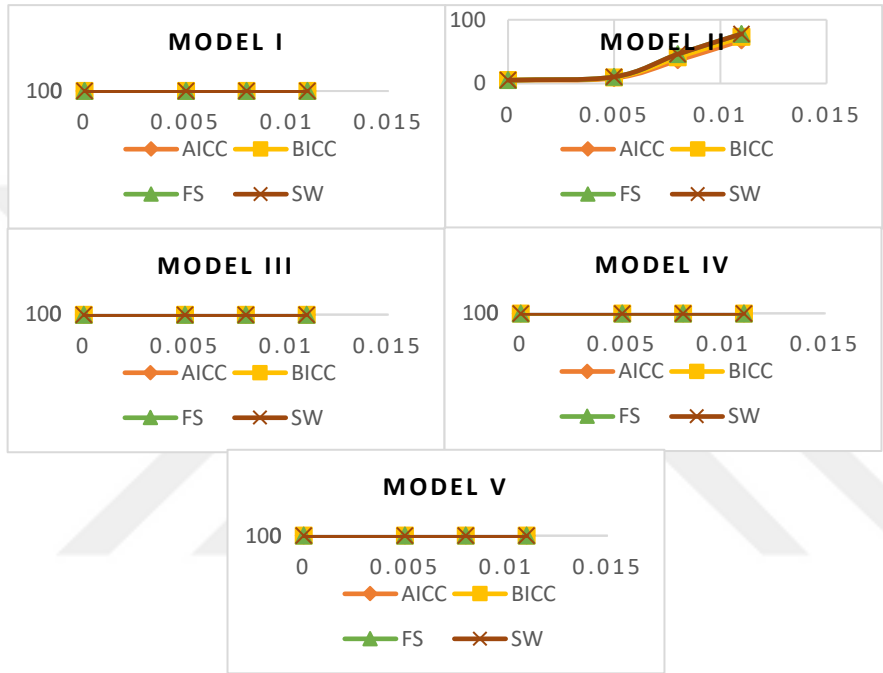
#### 4.1. Theoretical Comparison

The size of the ARDL Bounds test is assessed considering all five models at four different time dimensions of 25, 50, 100, and 200 using asymptotic critical values at a 5% level of significance as given in (Pesaran, Shin, and Smith 2001). These sizes are displayed in Error! Reference source not found. **of the Appendix.** At the smallest time dimension/sample size of  $T = 25$ , all model selection procedures have high size distortions as the empirical sizes are way higher than the assumed nominal size of 5%. However, when gradually the time dimension  $T$  is increased, the empirical size of each model selection procedure also improves, with varying convergence rates. FS, SW, BIC, and BICC has a better convergence rate than others.

All eight model selection procedures are evaluated based on their powers using these simulated critical values. To summarize, first, the Information criteria are compared on the basis of powers, and it is found that AICC and BICC outperform the rest in a small sample size of  $T = 25$ . However, as  $T$  increases, all five Information criteria tend to have the same powers. The power comparison of these five Information criteria for  $T = 25$  are displayed in **Error! Reference source not found.** in Appendix. For the rest of the time dimensions considered in this paper .i.e.,  $T = 50, 100 \& 200$ , all five Information criteria have same powers

(See Appendix **Error! Reference source not found.**). Similarly, the three structured model selection procedures .i.e., BW, FS, and SW are compared on the basis of their powers, and it is found that FS and SW are better as compared to the BW at the smallest time dimension of  $T = 25$ . However, with the increase of  $T$ , the three structured procedures have same powers. The power comparison for three structured procedures at  $T = 25$  are displayed in **Error! Reference source not found.** in Appendix. At other larger time dimensions, the three structured procedures have the same powers.

The two better performing information criteria .i.e., AICC and BICC are compared with two better performing structured model selection procedures .i.e., FS and SW at  $T=25, 50, 100,$  and  $200$ . The comparison at  $T=25$  is displayed in **Error! Reference source not found.** However, for  $T \geq 50$ , all these four procedures have approximately the same power. From **Error! Reference source not found.**, it is clearly evident that for Model I and II, SW, and FS have slightly higher powers than BICC and AICC. However, for Model III, IV, and V, BICC has higher powers than the rest of the three, and the rest of the three have the same powers. Even for these three models (III, IV, and V), the maximum gap is around 10% between the BICC's power and powers of the other three (AICC, SW, and FS).



**Figure 3.** Power Curves of Better Performing Model Selection Procedures at T=25.

Note: Null and different Alternative hypotheses are along X-axis, and Size & Power in % are along Y-axis.

## 4.2. Real Economic Applications

Coming to the real economic data application, we estimated the five error correction models .i.e., Model-1, Model-2, Model-3, Model-4, and Model-5 using the annual data of GDP<sup>1</sup> and Energy Consumption (EC)<sup>2</sup> of BRICS countries from 1990 to 2014. The eight model selection

<sup>1</sup> The data of “GDP per Capita in Current US\$” has been taken as GDP.

<sup>2</sup> The data of “Energy Use (Kg of oil equivalent per Capita)” has been taken as Energy Consumption (EC).

techniques have been used to select a plausible model with maximum lag length  $p=2$ . The results are presented in **Table** . It is apparent from the table that for all five BRICS countries if only first ECM (Model-1) is considered then, there is no significant evidence for the existence of cointegration using any of the model selection techniques except for India where cointegration exists at the 1% level of significance only using the three single path procedures .i.e., FS, BW, and SW. For the second ECM (Model-2), cointegration does not exist for Brazil using any of the model selection approaches. Similarly, for India, cointegration does not exist using any of the information criteria (AIC, AICC, BIC, BICC, and HQC). In the same manner, cointegration does not exist for South Africa using FS and SW. However, cointegration exists at the 1% level of significance for Russia and China using any model selection techniques. Similarly, cointegration exists at the 1% level of significance for South Africa using any of model selection approaches except two, i.e., FS and SW. In the same manner, cointegration exists at the 1% level of significance for India, using only three structured model selection approaches .i.e., FS, BW, and SW.

*Table 1: Bounds Test Results for Energy Consumption and GDP*

Type of ECM								
	AIC	AICC	BIC	BICC	HQC	FS	BW	SW
<b>Model-1</b>	2.619 (0.172)	2.619 (0.173)	2.619 (0.166)	2.619 (0.166)	2.619 (0.172)	1.349 (0.463)	2.619 (0.174)	1.349 (0.463)
<b>Model-2</b>	2.261 (0.352)	2.046 (0.417)	2.046 (0.409)	2.046 (0.409)	2.046 (0.414)	0.947 (0.851)	2.046 (0.414)	0.947 (0.851)
<b>Model-3</b>	2.927 (0.337)	2.408 (0.454)	2.408 (0.447)	2.408 (0.447)	2.408 (0.451)	0.246 (0.964)	2.408 (0.452)	0.246 (0.964)
<b>Model-4</b>	2.848 (0.417)	4.236 (0.138)	2.848 (0.408)	4.234 (0.129)	2.848 (0.411)	4.234 (0.132)	4.233 (0.133)	4.234 (0.132)
<b>Model-5</b>	4.246 (0.327)	6.225 (0.110)	4.246 (0.322)	6.225 (0.105)	4.246 (0.324)	6.225 (0.107)	6.225 (0.107)	6.224 (0.107)
<b>Model-1</b>	1.735 (0.351)	1.735 (0.350)	1.735 (0.346)	0.478 (0.796)	1.735 (0.345)	0.478 (0.7961)	0.478 (0.796)	0.478 (0.796)
<b>Model-2</b>	7.037*** (0.002)	6.116*** (0.006)	7.037*** (0.001)	6.116*** (0.007)	7.037*** (0.002)	6.1164** * (0.007)	7.037*** (0.002)	6.116*** (0.007)
<b>Model-3</b>	10.546** * (0.001)	7.335** (0.017)	10.546*** (0.001)	7.335** (0.016)	10.546** * (0.001)	7.335*** (0.017)	10.546** ** (0.001)	7.335** (0.017)

<b>Model-4</b>	6.980** (0.011)	4.644 (0.102)	6.980*** (0.009)	4.644* (0.096)	6.980*** (0.009)	4.644* (0.099)	6.980*** (0.009)	4.644* (0.099)	4.644* (0.099)
<b>Model-5</b>	10.454** (0.010)	6.763* (0.082)	10.454*** (0.007)	6.763* (0.077)	10.454** (0.008)	6.763* (0.077)	10.454** (0.01)	6.763* (0.01)	6.763* (0.077)
<b>SPM1</b>									
<b>Model-1</b>	0.789 (0.668)	1.285 (0.484)	1.285 (0.477)	1.285 (0.477)	0.789 (0.664)	10.114** (0.000)	10.114** (0.000)	10.114** (0.000)	10.114*** (0.000)
<b>Model-2</b>	1.182 (0.759)	0.817 (0.896)	0.817 (0.894)	0.817 (0.894)	1.182 (0.760)	6.514*** (0.003)	6.514*** (0.003)	6.514*** (0.003)	6.514*** (0.003)
<b>Model-3</b>	0.681 (0.883)	0.110 (0.988)	0.110 (0.986)	0.110 (0.986)	0.681 (0.881)	0.125 (0.985)	0.125 (0.985)	0.125 (0.985)	0.125 (0.985)
<b>Model-4</b>	4.339 (0.126)	3.528 (0.247)	3.528 (0.234)	2.535 (0.497)	4.339 (0.121)	1.427 (0.876)	1.427 (0.874)	1.427 (0.874)	1.427 (0.876)
<b>Model-5</b>	6.422 (0.095)	5.205 (0.198)	5.205 (0.189)	3.780 (0.409)	6.422* (0.094)	1.927 (0.808)	1.927 (0.809)	1.927 (0.809)	1.927 (0.808)
<b>SPM2</b>									
<b>Model-1</b>	1.236 (0.503)	1.372 (0.461)	1.236 (0.493)	1.372 (0.451)	1.236 (0.497)	1.372 (0.457)	1.372 (0.458)	1.372 (0.458)	1.372 (0.457)
<b>Model-2</b>	6.999*** (0.002)	35.701*** (0.000)	19.89*** (0.000)	35.701*** (0.000)	8.546*** (0.000)	35.701** (0.000)	35.678** (0.000)	35.678** (0.000)	35.702*** (0.000)

						(0.000)	(0.000)	(0.000)
<b>Model-3</b>	8.726*** (0.005)	23.109*** (0.000)	18.453*** (0.000)	23.109*** (0.000)	10.97*** (0.001)	23.109** * (0.000)	17.830* ** (0.000)	23.109*** (0.000)
<b>Model-4</b>	19.618** * (0.000)	16.871*** (0.000)	19.618*** (0.000)	15.653*** (0.000)	19.618** * (0.000)	16.871** * (0.000)	16.871* ** (0.000)	16.871*** (0.000)
<b>Model-5</b>	29.313** * (0.000)	25.264*** (0.000)	29.313*** (0.000)	23.099*** (0.000)	29.313** * (0.000)	25.264** * (0.000)	25.264* ** (0.000)	25.264*** (0.000)
<b>COINTEGRATION</b>								
<b>Model-1</b>	0.597 (0.748)	1.01 (0.583)	0.597 (0.748)	1.01 (0.574)	0.596 (0.750)	0.863 (0.634)	0.863 (0.636)	0.863 (0.634)
<b>Model-2</b>	7.153*** (0.002)	7.153*** (0.002)	7.153*** (0.000)	7.153*** (0.000)	7.153*** (0.0018)	1.415 (0.662)	7.153*** (0.002)	1.415 (0.662)
<b>Model-3</b>	9.131*** (0.004)	9.131*** (0.004)	9.131*** (0.004)	9.131*** (0.004)	9.131*** (0.004)	1.784 (0.601)	9.131*** (0.004)	1.784 (0.601)
<b>Model-4</b>	3.855 (0.188)	5.815** (0.032)	3.855 (0.178)	2.012 (0.686)	3.855 (0.182)	3.215 (0.301)	3.855 (0.182)	3.215 (0.301)
<b>Model-5</b>	5.551 (0.163)	7.932** (0.043)	5.551 (0.155)	3.017 (0.575)	5.551 (0.156)	4.734 (0.247)	5.551 (0.158)	4.734 (0.247)

Note: \*\*\*, \*\* and \* indicate the existence of cointegration at 1%, 5% and 10% level of significance respectively. P-values are given in parenthesis.

For Model-3, there is no significant evidence about the existence of cointegration for Brazil and India using any of model selection approaches. However, cointegration exists at the 1% level of significance for Russia and China using any of model selection approaches. Similarly, for South Africa, cointegration exists at the 1% level of significance using any of model selection techniques except two, i.e., FS and SW. When the fourth ECM (Model-4) is considered, then there is no evidence about the existence of cointegration for Brazil and India using any of model selection procedures. Similarly, cointegration does not exist for South Africa using any of model selection techniques except AICC. Cointegration exists for Russia and China using any of model selection procedures. If the fifth ECM (Model-5) is assumed, then cointegration does not exist for Brazil and India using any of the model selection approaches. Similarly, cointegration does not exist for South Africa using any of model selection procedures except AICC. However, cointegration exists for Russia and China using any of model selection techniques. From the overall 25 cases (5 ECMs and 5 BRICS countries) cointegration is detected only 10 times when AIC is used. Similarly, cointegration is detected 11, 10, 10, 11, 10, 12, and 10 times when AICC, BIC, BICC, HQC, FS, BW, and SW are used respectively.

As for as the cross country comparison is concerned, for Brazil, there is no evidence of a long-run relationship between EC and GDP irrespective of the model selection technique.

However, the long-run relationship between the said macroeconomic variables exists for Russia, considering all models except Model-1. In the same manner, there is evidence of a long-run relationship between EC and GDP for India when Model-1 or Model-2 are considered, and structured model selection techniques are used. Coming to China, it is evident that there is a long-run relationship between EC and GDP for all models except Model-1. Finally, the long-run relationship between EC and GDP exists for South Africa when Model-2 and Model-3 are considered majorly.

For the detection of cointegration between Oil Prices (OP) and GDP, the five ECMs .i.e., Model-1, Model 2, Model 3, Model 4 and Model 5 have been estimated using the annual data of GDP<sup>3</sup> and Oil Prices<sup>4</sup> from 1990 to 2016 for all BRICS member countries by considering Oil Prices as an exogenous and GDP as an endogenous variable. The results are given in **Table** . For the first ECM (Model 1), cointegration does not exist between Oil Prices and GDP for Brazil, Russia, China, and South Africa using any of model selection procedures. However, cointegration exists between Oil Prices and GDP for India using any of the model selection approaches. When the second ECM .i.e., Model 2, is considered, then only for Brazil cointegration does not exist using any of model selection

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<sup>3</sup> Data of “GDP per Capita in current US\$” is taken as GDP.

<sup>4</sup> Data of “Cushing, OK WTI Spot Price FOB (US\$ per Barrel)” is taken as Oil Prices (OP).

techniques. From the rest of the four countries, cointegration exists for India and China using any of the model selection procedures. For Russia, cointegration exists using any of model selection approaches except AIC. Similarly, for South Africa, cointegration exists using any of model selection approaches except BIC, FS, and SW.

Table 2: Bounds Test Results for Oil Prices and GDP

Type of ECM	Model Selection Procedure							
	AIC	AIC C	BIC	BICC	HQC	FS	BW	SW
<b>BRAZIL</b>								
<b>Model-1</b>	1.725 (0.353)	1.725 (0.353)	1.725 (0.348)	1.725 (0.348)	1.725 (0.348)	1.725 (0.345)	1.725 (0.345)	1.725 (0.345)
<b>Model-2</b>	1.09 (0.798)	1.09 (0.799)	1.09 (0.796)	1.09 (0.796)	1.09 (0.800)	1.09 (0.800)	1.09 (0.800)	1.09 (0.800)
<b>Model-3</b>	1.634 (0.642)	1.634 (0.643)	1.634 (0.633)	1.634 (0.633)	1.634 (0.635)	1.634 (0.636)	1.634 (0.636)	1.634 (0.636)
<b>Model-4</b>	1.545 (0.849)	1.545 (0.848)	1.545 (0.845)	1.545 (0.845)	1.545 (0.846)	1.545 (0.846)	1.545 (0.845)	1.545 (0.846)
<b>Model-5</b>	1.605 (0.868)	1.605 (0.868)	1.605 (0.864)	1.605 (0.864)	1.605 (0.864)	1.605 (0.864)	1.605 (0.865)	1.605 (0.864)

RUSSIA								
<b>Mod el-1</b>	1.916 (0.309)	0.737 (0.691)	0.737 (0.688)	0.737 (0.687)	1.916 (0.310)	0.737 (0.689)	0.737 (0.691)	0.737 (0.689)
<b>Mod el-2</b>	2.028 (0.423)	5.840*** (0.009)	5.840*** (0.008)	5.840** (0.008)	5.840*** (0.008)	5.840*** (0.008)	5.840*** (0.008)	5.840*** (0.008)
<b>Mod el-3</b>	3.026 (0.321)	8.253*** (0.008)	8.253*** (0.007)	8.253** (0.007)	8.253*** (0.008)	8.253*** (0.007)	8.253*** (0.008)	8.253*** (0.007)
<b>Mod el-4</b>	2.110 (0.661)	5.247* (0.06)	5.247* (0.052)	5.247* (0.052)	2.110 (0.652)	5.247* (0.056)	5.247* (0.056)	5.247* (0.056)
<b>Mod el-5</b>	2.209 (0.754)	6.754* (0.083)	6.754* (0.077)	6.754* (0.077)	2.209 (0.753)	6.754* (0.078)	6.754* (0.079)	6.754* (0.078)
INDIA								
<b>Mod el-1</b>	13.106*** (0.000)	13.106*** (0.000)	13.106*** (0.000)	13.106*** (0.000)	13.106*** (0.000)	16.131*** (0.000)	16.131*** (0.000)	16.131*** (0.000)
<b>Mod el-2</b>	12.867*** (0.000)	13.045*** (0.000)	13.985*** (0.000)	13.045*** (0.000)	13.985*** (0.000)	10.985*** (0.000)	10.985*** (0.000)	10.985*** (0.000)

<b>Model-3</b>	3.063 (0.316)	1.885 (0.577)	2.833 (0.353)	1.885 (0.574)	2.833 (0.3537)	0.418 (0.936)	0.418 (0.937)	0.418 (0.936)
<b>Model-4</b>	4.553 (0.1077)	3.302 (0.292)	4.469 (0.109)	2.327 (0.565)	4.552 (0.105)	1.190 (0.935)	1.190 (0.936)	1.190 (0.935)
<b>Model-5</b>	6.820* (0.080)	4.874 (0.233)	6.621* (0.083)	3.490 (0.469)	6.820* (0.075)	1.782 (0.834)	1.782 (0.835)	1.782 (0.8340)
<b>CHINA</b>								
<b>Model-1</b>	0.916 (0.62)	1.417 (0.446)	0.916 (0.614)	1.417 (0.437)	0.916 (0.615)	1.417 (0.443)	1.417 (0.443)	1.417 (0.443)
<b>Model-2</b>	48.58*** (0.000)	48.024*** (0.000)	48.04***5 (0.000)	108.765*** (0.000)	48.024*** (0.000)	48.024*** (0.000)	48.024*** (0.000)	48.024*** (0.000)
<b>Model-3</b>	41.635*** (0.000)	40.717*** (0.000)	40.717*** (0.000)	23.929*** (0.000)	40.717*** (0.000)	40.717*** (0.000)	40.718*** (0.000)	40.718*** (0.000)
<b>Model-4</b>	28.219*** (0.000)	20.553*** (0.000)	28.219*** (0.000)	16.195*** (0.000)	28.219*** (0.000)	2.189 (0.626)	25.504*** (0.000)	2.189 (0.626)
<b>Model-5</b>	41.975***	30.798***	41.975***	24.279***	41.975***	3.21 (0.54)	38.204***	3.21 (0.54)

	(0.00 0)	(0.00 0)	(0.00 0)	(0.000 )	(0.00 0)		(0.00 0)	
<b>SOUTH AFRICA</b>								
<b>Model-1</b>	0.884 (0.63 2)	1.405 (0.44 9)	0.884 (0.62 5)	0.411 (0.829 )	0.884 (0.62 9)	0.769 (0.67 3)	1.405 (0.44 7)	0.77 (0.67 3)
<b>Model-2</b>	11.65 6*** (0.00 0)	10.41 7*** (0.00 0)	11.65 6*** (0.00 0)	1.521 (0.617 )	11.65 6*** (0.00 0)	1.521 (0.61 5)	10.90 9*** (0.00 0)	1.521 (0.61 5)
<b>Model-3</b>	17.11 7*** (0.00 0)	14.93 7*** (0.00 0)	17.11 8*** (0.00 0)	1.821 (0.589 )	17.11 7*** (0.00 0)	1.821 (0.59 0)	16.28 3*** (0.00 0)	1.821 (0.59 0)
<b>Model-4</b>	10.38 4*** (0.00 03)	5.174 * (0.06 4)	10.74 5*** (0.00 0)	1.661 (0.810 )	10.38 4*** (0.00 0)	1.661 (0.81 1)	10.74 5*** (0.00 0)	1.661 (0.81 1)
<b>Model-5</b>	15.38 3*** (0.00 0)	7.503 * (0.05 3)	15.30 1*** (0.00 0)	2.378 (0.716 )	15.38 3*** (0.00 0)	2.378 (0.71 6)	15.30 1*** (0.00 0)	2.378 (0.71 6)

Note: \*\*\*, \*\* and \* indicate the existence of cointegration at 1%, 5% and 10% level of significance respectively. P-values are given in parenthesis.

If the third ECM i.e., Model 3 is assumed, then cointegration does not exist for Brazil and India using any of model selection techniques. However, cointegration exists for

China using any of model selection techniques. For Russia, cointegration exists using any of model selection approaches except AIC. Similarly, for South Africa, cointegration exists using any of model selection procedures except BICC, FS, and SW. In the same manner, when the fourth ECM .i.e., Model 4, is considered, then cointegration does not exist for Brazil and India using any of model selection techniques. Cointegration exists at the 1% level of significance for China using any of model selection procedures except two .i.e., FS and SW. Similarly, for Russia, cointegration is detected at the 10% level of significance using six model selection techniques (AICC, BIC, BICC, FS, BW, and SW) and using the rest of two (AIC and HQC) cointegration is not detected. Similarly, for South Africa, there is evidence about the existence of cointegration using any of the model selection techniques except three. i.e., BICC, FS, and SW.

When the fifth ECM .i.e., Model 5, is assumed, then for only Brazil, cointegration does not exist using any of model selection procedures. Similarly, cointegration does not exist for India using five model selection techniques (AICC, BICC, FS, BW, and SW) and using the rest of three (AIC, BIC, and HQC) cointegration exists. However, cointegration between oil prices and GDP exists at the 1% level of significance for China using any of model selection approaches except two .i.e., FS and SW. In the same manner, cointegration exists at the 10% level of significance for Russia using any of model

selection procedures except two .i.e., AIC and HQC. Similarly, cointegration between oil prices and GDP exists for South Africa using any of model selection approaches except three, .i.e., BICC, FS, and SW. From the overall 25 cases (5 ECMs and 5 BRICS countries) cointegration between oil price and GDP is detected 11 times using AIC as a model selection technique. Similarly, cointegration is detected 14, 15, 10, 13, 8, 14, and 8 times using AICC, BIC, BICC, HQC, FS, BW, and SW as model selection techniques respectively.

Coming to cross country comparison, no evidence of the long run relationship between OP and GDP for Brazil, positive evidence for Russia when mainly Model-2 and Model-3 are considered, positive evidence for India when majorly Model-1 and Model-2 are considered, strong evidence for China when all models are considered except Model-1 and strong evidence for South Africa considering all models except Model-1.

For the detection of cointegration between Broad Money (BM) and GDP by Bounds test for all five BRICS member countries, the five Error Correction Models (ECMs) .i.e., Model 1, Model 2, Model 3, Model 4 and Model 5 have been estimated considering Broad Money as exogenous and GDP as an endogenous variable. The annual data of Broad Money<sup>5</sup> and

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<sup>5</sup> The data of "Broad Money in Current Local Currency Unit (LCU)" has been taken as Broad Money (BM).

GDP<sup>6</sup> from 1993 to 2015 have been used for this purpose. The results are given in Error! Reference source not found.. When the first ECM .i.e., Model 1, is assumed and estimated, then cointegration does not exist using any of model selection procedures for China. However, cointegration is detected at the 1% level of significance using any of model selection procedures for South Africa. Similarly, cointegration exists using any of model selection approaches except two .i.e., FS, and SW for Russia. In the same manner, there is evidence of cointegration at the 1% level of significance for India using any of model selection methods except two .i.e., AIC and BW. Continuingly, there is evidence about the existence of cointegration at the 1% level of significance for Brazil using only five model selection methods, and these five are AICC, BICC, FS, BW, and SW.

**Table 3.** Bounds Test Results for Broad Money and GDP.

Type of ECM	Model Selection Procedures							
	AIC	AICC	BIC	BICC	HQC	FS	BW	SW
<b>BRAZIL</b>								
<b>Model-1</b>	1.221 ***	104.17 1*** (0.000)	0.63 (0.734)	104.17 1*** (0.000)	1.221 (0.503 )	92.13 3***	104.17 1*** (0.000)	92.13 3***

<sup>6</sup> The data of "GDP in Current Local Currency Unit (LCU)" has been taken as GDP.

	(0.508 )					(0.000 )		(0.000 )
<b>Model-2</b>	9.156 *** (0.000 )	20.129 *** (0.000)	20.129* ** (0.000)	20.129 *** (0.000)	9.156 *** (0.000 )	20.12 9*** (0.000 )	20.129 *** (0.000)	20.12 9*** (0.000 )
<b>Model-3</b>	10.11 7*** (0.001 )	13.052 *** (0.000)	13.052* ** (0.000)	13.052 *** (0.000)	10.11 7*** (0.001 )	13.05 2*** (0.000 )	13.052 *** (0.000)	13.05 2*** (0.000 )
<b>Model-4</b>	5.930 ** (0.03)	9.151* ** (0.001)	6.084**  (0.021)	9.151* ** (0.001)	6.084 *** (0.022 )	9.151 (0.001 )	5.895* * (0.028)	9.151  (0.001 )
<b>Model-5</b>	8.889 ** (0.023 )	13.719 ** (0.001)	9.113**  (0.018)	13.719 *** (0.001)	9.113 ** (0.019 )	13.71 9*** (0.001 )	8.450* * (0.028)	13.71 9*** (0.001 )
<b>RUSSIA</b>								
<b>Model-1</b>	9.457 *** (0.001 )	9.457* ** (0.001)	9.457** * (0.000)	9.457* ** (0.000)	9.457 *** (0.001 )	1.450 (0.433 )	9.457* ** (0.001)	1.450  (0.433 )
<b>Model-2</b>	16.70 6*** (0.000 )	22.609 *** (0.000)	16.706* ** (0.000)	50.177 *** (0.000)	16.70 6*** (0.000 )	50.17 7*** (0.000 )	22.884 *** (0.000)	50.17 7*** (0.000 )
<b>Model-3</b>	25.06 *** (0.000 )	32.784 *** (0.000)	25.06** * (0.000)	56.533 *** (0.000)	25.06 *** (0.000 )	56.53 3*** (0.000 )	32.650 *** (0.000)	56.53 3*** (0.000 )

<b>Model-4</b>	21.12 4*** (0.000)	45.165 *** (0.000)	52.81** * (0.000)	47.882 *** (0.000)	55.64 7*** (0.000)	45.16 5*** (0.000)	52.809 *** (0.000)	45.16 5*** (0.000)
<b>Model-5</b>	7.328 * (0.061)	13.834 *** (0.001)	17.221* ** (0.000)	14.844 *** (0.000)	18.02 1*** (0.000)	13.83 4*** (0.000)	17.221 *** (0.000)	13.83 4*** (0.001)
<b>INDIA</b>								
<b>Model-1</b>	1.457 (0.434)	5.965* ** (0.009)	5.965** * (0.007)	5.965* ** (0.007)	5.965 *** (0.008)	5.965 *** (0.008)	1.682 (0.364)	5.965 *** (0.008)
<b>Model-2</b>	4.619 ** (0.032)	3.427 (0.126)	5.468** (0.014)	3.427 (0.115)	4.619 ** (0.033)	3.427 (0.119)	3.427 (0.12)	3.427 (0.119)
<b>Model-3</b>	6.907 ** (0.020)	3.057 (0.316)	7.163** (0.017)	3.057 (0.307)	6.907 ** (0.02)	3.057 (0.311)	3.057 (0.313)	3.057 (0.311)
<b>Model-4</b>	6.316 ** (0.020)	1.915 (0.733)	6.316** (0.016)	1.915 (0.728)	6.316 ** (0.017)	1.915 (0.732)	5.000* (0.076)	1.915 (0.732)
<b>Model-5</b>	8.793 ** (0.025)	2.872 (0.614)	8.793** (0.022)	2.872 (0.605)	8.793 ** (0.023)	2.872 (0.610)	6.412* (0.097)	2.872 (0.610)
<b>CHINA</b>								

<b>Model-1</b>	0.126 (0.949)	1.443 (0.438)	0.125 (0.950)	1.443 (0.430)	0.126 (0.949)	1.443 (0.434)	0.175 (0.926)	1.443 (0.434)
<b>Model-2</b>	5.332** (0.015)	23.521*** (0.000)	23.521** (0.000)	23.521*** (0.000)	23.521*** (0.000)	23.521*** (0.000)	23.521*** (0.000)	23.521*** (0.000)
<b>Model-3</b>	5.629* (0.049)	32.121*** (0.000)	32.12** (0.000)	32.121*** (0.000)	32.121*** (0.000)	32.121*** (0.000)	32.121*** (0.000)	32.121*** (0.000)
<b>Model-4</b>	9.676*** (0.000)	20.572*** (0.000)	9.676** (0.000)	20.572*** (0.000)	9.676*** (0.000)	20.572*** (0.000)	9.676** (0.000)	20.572*** (0.000)
<b>Model-5</b>	14.498*** (0.000)	30.725*** (0.000)	14.498 (0.0003)***	30.725*** (0.000)	14.498*** (0.000)	30.725*** (0.000)	14.498*** (0.000)	30.725*** (0.000)
<b>SOUTH AFRICA</b>								
<b>Model-1</b>	16.257*** (0.000)	16.257*** (0.000)	16.257** (0.000)	16.257*** (0.000)	16.257*** (0.000)	16.257*** (0.000)	16.257*** (0.000)	16.257*** (0.000)
<b>Model-2</b>	17.830*** (0.000)	17.651*** (0.000)	17.651** (0.000)	17.651*** (0.000)	17.830*** (0.000)	13.836*** (0.000)	17.651*** (0.000)	13.836*** (0.000)
<b>Model-3</b>	11.63*** (0.001)	11.657*** (0.001)	11.657** (0.000)	11.657*** (0.000)	11.63*** (0.000)	1.555 (0.658)	11.657*** (0.001)	1.555 (0.658)

<b>Model-4</b>	7.053 ** (0.011)	2.284 (0.591)	7.222** * (0.006)	2.284 (0.579)	7.222 *** (0.007)	2.284 (0.583)	7.222* ** (0.007)	2.284 (0.583)
<b>Model-5</b>	9.555 ** (0.017)	2.807 (0.628)	9.608** (0.013)	2.807 (0.617)	9.608 ** (0.014)	2.807 (0.620)	9.608* * (0.015)	2.807 (0.620)

Note: \*\*\*, \*\* and \* indicate the existence of cointegration at 1%, 5% and 10% level of significance respectively. P-values are given in parenthesis.

If the second ECM (Model 2) is considered and estimated for the detection of cointegration then there is evidence about existence of cointegration at the 1% level of significance for Brazil, Russia, China and South Africa using any of model selection procedures. However, cointegration is detected at the 5% level of significance for India using only three model selection methods and these are AIC, BIC and HQC. When the third ECM i.e. Model 3 is estimated for the detection of cointegration then there is evidence about the existence of cointegration at the 1% level of significance for Brazil, Russia and China using any of model selection methods. However, for India cointegration at the 5% level of significance is detected using only three model selection approaches and these three are AIC, BIC and HQC. Similarly, for South Africa detection of cointegration is possible when six model selection methods are used and these six are AIC, AICC, BIC, BICC, HQC and

BW. If the fourth ECM (Model 4) is considered for the detection of cointegration between then there is evidence about the existence of cointegration for Brazil, Russia and China. Similarly, cointegration exists for India using only four model selection methods and these four are AIC, BIC, HQC and BW. In same manner, when these same four model selection methods are used for the detection of cointegration in case of South Africa then there is evidence about the existence of cointegration.

If the fifth ECM (Model 5) is estimated for detection of cointegration then cointegration exists for Brazil, Russia and China using any of model selection methods. Continuingly, for India only use of four model selection methods results in the existence of cointegration and these four are AIC, BIC, HQC and BW. Similar is the case of South Africa where use of the same four model selection techniques (AIC, BIC, HQC and BW) results in existence of cointegration. From overall 25 (5 ECMS and 5 BRICS member countries) cases, 22 times cointegration has been detected when AIC is used as the model selection method. Similarly, the cointegration has been detected 18, 23, 18, 23, 16, 21 and 16 times using AICC, BIC, BICC, HQC, FS, BW and SW as model selection methods respectively.

The long run relationship between BM and GDP has significant evidence of its existence for Brazil, Russia and

South Africa irrespective of any of five models considered, for India when Model-1 is considered only and for China when all models are considered except Model-1.

## **5. Conclusions and Recommendations**

This paper is aimed to find a better model selection technique and to assess the performance of eight different model selection techniques for Bounds test of cointegration by comparing the performance of these eight model selection techniques. Furthermore, it is also aimed to compare the structured model selection procedures with unstructured i.e. information criteria. Moreover, it is also investigated that how these information criteria are behaving for real data i.e. whether they behave similar to the unstructured ones or different.

The Monte Carlo experiment suggest and conclude that for small sample size of 25, these are performing slightly different. However, for moderate and large sample sizes they behave same. These results and conclusions are partially in line with (Castle, Doornik, and Hendry 2011) and (Rashid 2014). The difference in the result is due to the model as in the current study error correction model is considered which has not been explored and considered earlier for assessing model selection procedures. From the results of real data analysis using three pairs of macroeconomic variables for BRICS

member countries. The first pair is of Energy Consumption and GDP, and for this pair nearly all model selection procedures have same behavior when they are used in Bounds test to detect the cointegration between Energy Consumption and GDP. However, three model selection approaches, two are the information criteria i.e. Akaike Information Criterion Corrected (AICC) and Bayesian Information Criterion (BIC) and one is structured single path model selection approach i.e. Backward Elimination (BW) have the most common behavior than rest. Similarly, for the detection of cointegration between Oil Price and GDP, three model selection procedures have the same behavior when these are used in Bounds test for model selection. From these three similarly behaving model selection techniques, two are information criteria i.e. Akaike Information Criterion Corrected (AICC) and Bayesian Information Criterion (BIC) and one is structured single path model selection approach i.e. Backward Elimination (BW). Continuingly, for the testing of existence of cointegration between Broad Money and GDP, behavior of three model selection information criteria i.e. Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC) and Hannan and Quinn Information Criterion (HQC) is same. However, for the same pair, Backward Elimination (BW) procedure of model selection also behave similar to the three.

Carrying out the cross country comparison, it is concluded that strong and compelling evidence of long run relationship

between EC and GDP exists only for the two large economies from BRICS i.e. Russia and China. For India and South Africa there is evidence in favor and in against of long run relationship between EC and GDP. Strong and compelling evidence is found that there is no long run relationship between EC and GDP for Brazil. Same is the case is for the pair of OP and GDP with one exception that now strong evidence is also found for South Africa. However, for the last pair of BM and GDP, except India all five economies of BRICS have strong evidence of level relationship.

In the light of above conclusions, it is concluded that in general information criteria and structured model selection procedures have the same behavior and they select the same model for Bounds cointegration test. However, as structured model selection procedures are strongly supported by econometric theory, so they may be preferred over the unstructured ones i.e. information criteria. This is due to the fact that in testing of cointegration using Bounds test the problem is of model selection not lag selection, because the same test equation will act as error correction model if cointegration is found and will be used for policy implications. Furthermore, the structured model selection procedures may be preferred greatly in dealing with a large number of candidate variables due to their quick and easy calculation.

The current study has certain limitations in terms of data availability as it has time series of length less than 30. Furthermore, it also does not account for model validation using residual diagnostics and stability testing because the model selection procedures compared here in the study does not consider model validation. Therefore, it will be a worthy investigation in future, that how the model procedures with model validation (like Autometrics) are performing and also how the performance of these procedures change when there is enough length of time series.

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**Appendix E:**

**Publication 4:A TURKISH PERSPECTIVE OF  
ISLAMIC CORPORATE GOVERNANCE FOR A  
SUSTAINABLE FINANCIAL PERFORMANCE**

**Journal Name:**

Strategic Management Journal ( Submitted under review)

**Indexing and Abstracting:**

Web of Science -SCI

# **A TURKISH PERSPECTIVE OF ISLAMIC CORPORATE GOVERNANCE FOR A SUSTAINABLE FINANCIAL PERFORMANCE**

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## **Abstract:**

This paper evaluates the role that integration of Islamic corporate governance has on the overall sustainable financial performance of a firm. Unlike the case with traditional corporate governance, Islamic institutions have a shariah supervisory board (SSB) which is tasked with the role of acting as the main supervisory, ensuring that the organization is observing the established shariah principles to guide its performance. The qualitative study methodology was adopted for the study to aid in comprehension of the underlying issues concerning adoption of Islamic corporate governance in a firm and the impact it has on sustainable financial performance. The study relied on qualitative research technique via sending questionnaires to 50 CEO and Board of directors selected via snowball sampling. The questionnaires were meant to examine the

concept of ICG and the impact it has on the sustainable financial performance of an organization in Turkey. The results indicate there is a strong positive relationship between ICG and sustainable financial performance of organizations in Turkey. The analysis further indicates that shariah governance and managerial ownership have a moderating role in the performance of the organization due to the confidence they offer to the shareholders. These findings will provide a roadmap to the Islamic firms when it comes to the integration of ICG in their operations to improve the sustainability of their financial performance. One limitation of this study is the limited nature of ICG in Turkey, whereby the concept of corporate governance is still in the developing stages.

**Key words:** *Corporate Governance, Turkey, Islamic corporate governance, Sustainable financial performance, Shariah Supervisory Board, Firm's financial performance*

## **Introduction**

The model of Islamic banking which is characterized by the sharing of both profits and losses has been in existence for a long time in many parts of the world, whereby there is abhorrence on the imposition of interest. The core dissimilarity between Islamic banking and the other traditional forms of banking is not founded on the business practice but the principles guiding Islamic banking when it comes to the activities and reputation (Siswanti, et al., 2017). The values that are founded in Sharia are indicated not only in the activity of their transactions but also in the extent of its effect on the society. The additional way to differentiate between conventional and Islamic banking is the prevalence of sharia supervisory board (SSB) which is used as part of the internal governance structure of the entity while the traditional banking is deemed to only have a board of directors as the internal supervisory component (Siswanti, et al., 2017). It thus becomes evident that reliable corporate governance in Islamic banking is vital to guarantee that the depositors will not suffer losses attributed to the fact it would be easier to “defraud” them than is the case with depositors in the conventional banks.

The realization of these attributes, therefore, makes it imperative to involve independent advisors, experts, and thorough supervision of the sharia related issues and their

impact on the sustainable performance of an organization. Garas (2012) asserts that the fact Muslims do not exhibit the same authority on traditional financial entities, they sought to create the Islamic financial that are founded on sharia and that institutions are controlled by the SSB and BODs whose role is to guarantee their compliance with Sharia law. The presence of the SSB is deemed to be acting as the in-house religious council to ensure that the Islamic financial institutions become more sensitive towards all the activities linked to the social and environmental regulations (Jan, Marimuthu & Hassan, 2019).

According to Hashim, Mahadi & Amran, (2015), the fact that fact the term governance can be used to refer to the relationship existing between the government and its constituents could then lead to the assertion that corporate governance relates to the corporations and its constituents. The definition, therefore, leads to the question of who is to be considered constituents of this corporation. Although numerous parties could support the position that a corporation should be having extensive corporate responsibility mandate, in most traditional conceptions of corporate governance the core relationships tend to be between the management and the shareholders.

In contrast, Islamic corporate governance predominantly has an extensive commission that has obligations that extend to customers, suppliers, employees,

and competitors who embrace the spiritual and temporal needs of the Islamic community (Hashim, Mahadi & Amran, 2015). Corporate governance is among the fast emerging fields in the business sector that has a significant impact on the overall performance of an organization. It can be considered as cooperation between the top management, shareholders, and board of directors that exhibits an alignment towards the success of the organization (Siswanti, et al., 2017). Corporate governance could additionally be used to explain the existing relationship between the objective of the board of directors and shareholders.

Corporate governance is the means through which an organization is directed, controlled, and administered. The creation of corporate governance presents an overview of the distribution of roles as well as responsibilities and rights among the different stakeholders in an organization. They focus on the identification of the policies as well as practices and procedures that are meant to aid accurate decision making for the diverse corporate affair (Al-Suhaibani & Naifar, 2014). In this case, they offer the basis for an organization to use in developing its goals and adopting innovative methods that will be used in accomplishing the goals via the close assessment of the performance process.

Al-Suhaibani & Naifar, (2014), asserts that shareholders influence corporate governance since it suits their

interests as employees, customers, creditors, government agencies, debtors, financial institutions, banks and the society at large. The main players when it comes to corporate governance include the shareholders, management as well as board of directors.

Globalization has encouraged an increase in competition, increasing the complexity and toughness of the business environment. It thus becomes evident that organizations are progressively working towards the improvement of performance that is reflected in their values. The values, in this case, are vital to the firm considering that the core objectives of organizations entail increasing their overall value. Every organization tends to focus on increasing its value which is seen in the overall prosperity of its stakeholders (Platonova, et al., 2018).

The fundamental aim of undertaking effective corporate oversight is to ensure that the management of an organization is acting in the best interests of the shareholders. It follows that corporate governance acts as a control mechanism, regulating and managing the company's profile as a way of increasing their prosperity. It is additionally concerned with the perspectives of the investors concerning the benefits that are created by the organization's leadership (Hasan, 2009).

## **Statement of the problem**

In the contemporary business environment, corporate governance has become a major topic when examining the global corporate market. This research seeks to assess the overall impact of Islamic corporate governance on the performance of a firm, using the case study of Turkey. The rationale is informed by the fact that the Islamic banking sector exhibits an extensive scope in the Muslim nations as well as non-Muslim nations; an attribute that makes it imperative to examine the impact of Islamic corporate governance on the sustainable financial performance of organizations.

## **State of Corporate governance in Turkey**

According to Akman, Mugan & Akisik, (2011), Turkey's model of corporate governance along with the related reporting measures are in developing stage, there is very little literature of corporate governance and almost none relating to Islamic corporate governance in the country. This is the opposite of the case in the more industrialized countries that have more advanced corporate governance systems. The concept of Islamic corporate governance has been studied by a few researchers and scholars in Turkey yet there are no previous peer-reviewed studies on the impact of Islamic corporate governance on the sustainable financial performance of firms in Turkey (Akman, Mugan & Akisik, 2011). The

attribute has been the major factors that shaped the present study, researching literature on the relationship between Islamic corporate governance and sustainable financial performance of an organization to offer practitioners and authors foundation with which to base their policies and studies.

The underlying assertion in the contemporary business environment is the fact that Islamic banking institutions have responded extremely slowly to the modern idea of sustainability. The study is using Turkey to undertake an in-depth investigation since Turkey has some of the highest Islamic businesses and the results of this study could be generalized to other Islamic business institutions (Claessens & Yurtoglu, 2013). Additionally, the nature of the identified environmental, economic as well as social complexities that are faced by Islamic businesses in Turkey offers an indication that these businesses must improve on their sustainability practices and further adopt a sharia-based sustainability evaluation index (Claessens & Yurtoglu, 2013).

## **Literature Review**

Gürbüz, Aybars & Kutlu (2010) examined the effect of corporate governance on an organization's financial performance in Turkey, considering the subject of institutional ownership. They relied on a sample of 164 annual observations

of the real sector companies on the Istanbul stock exchange for 4 years between 2005 and 2008. They established that corporate governance measures served to enhance the performance of a firm in the course of the period under observation. Because of their analyses, institutional investors are deemed to focus on improving the financial performance of all organizations in cases where the effect on companies listed on the index is greater than the ones that have not been listed on the index.

Akman et al (2011) on the other hand sought to assess if foreign or family ownership impacts the performance of an organization differently in Turkey. They focused on the analysis of the prevalent association between the structure of ownership and performance of the firm for the publicly traded entities that are listed on the Istanbul stock exchange between 2005 and 2009. They determined that there is an adverse association between family ownership and the performance of a firm while foreign ownership exhibited a positive effect on the performance of the firm.

Sengur (2011) in her study assesses if effective integration of corporate governance tenets makes a difference when the performance of the business in Turkey. The outcomes of her study demonstrated that there is no significant difference when it comes to corporate governance index companies operating in Turkey when performance is evaluated

based on return on investment as well as Tobin Q. further, her studies supported the assertion there is no significant difference in the context of the performance of corporate governance index when examining companies between the age of t0 to t1, whereby t0 is the preceding year of joining the corporate governance index while t1 is the first year being in the corporate governance index.

### **The importance of corporate governance**

Effective corporate governance is essential when it comes to the creation of an environment that promotes efficiency as well as sustainable growth in all sectors of a company. The significance of corporate governance in Islamic institutions is characterized by the outcomes of a research that was undertaken by (Mollah & Zaman, (2015), which asserts that the implementation of corporate governance in Islamic institutions is meant to promote public confidence in these Islamic institutions. The execution of corporate governance in business institutions is therefore vital. The position is founded in the fact that corporate governance serves to not only create the presence of these business institutions alone but further preserve the reputation of the good name of these Islamic institutions in the eyes of the society considering there is no guarantee that an institution that has a name of sharia explicitly subject to and fully satisfies the principles of sharia

(Safieddine, 2009). Thus for this objective to be realized, Islamic bans must guarantee the presence of excellent corporate governance structures as well as processes.

Numerous studies have signified the relevance of corporate governance when it comes to issues revolving around the performance of companies (Aggarwal, 2013), Haider et al., 2015). The implications of these studies have indicated that corporate governance exhibits a positive effect on the sustainable financial performance of a company. Sustainable financial performance is one of the most resourceful information sources for investors. A company's profitability is one of the most reliable measures of sustainable financial performance. It follows that superior profitability coupled with strong long term development tends to impact the sustainability of the company. Further, according to Nawaiseh (2015), financial performance is indicated by the return of equity and return on investment since they exhibit a positive effect on the disclosures of an organization's corporate social responsibility.

Islamic corporate governance sets its focus on the creation of the ways that economic agents, the legal systems besides the corporate governance could by social and moral values be founded on shariah laws. Proponents of ICG hold the position that all corporate, economic as well as business activities ought to be founded on an ethareligious model whose

fundamental objective is the promotion of the wellbeing of individuals besides society as a whole (Hashim, Mahadi & Amran, 2015). In most ways, ICG advances that its objective is traditional corporate governance although embodying religious-based moral tenets of Islam.

Platonova, (2018) contend that financial performance is used about the financial condition of a company at a specific period and relates to the attributes of fundraising along with distribution of funds that are measured indicators of liquidity, capital adequacy, and long term value earned by the shareholders via integration of social, economic and environmental attributes in the business strategy. Sustainability on the other hand is seen to be the promotion of the triple bottom line of people-planet and profit.

When it comes to Islamic corporate governance, one of the common attributes is the fact that Islamic financial institutions tend to disclose more corporate sustainability disclosure's in their annual financial reports that is the case with traditional businesses (Siswanti, et al., 2017). In ICG, the challenge imposed by the need to increasingly make disclosures of the company's financial information is addressed by the organic participatory culture of the Shuratic process both in the context of the discursive body and the learning medium with the tenets of the world systems.

Islamic corporate governance is not significantly different from the traditional definition since it is used about the system by which organizations are directed and controlled with the sole objective of meeting the entity's objective via protection of the rights and interests of the different stakeholders (Siswanti, et al., 2017). However, in the Islamic model, corporate governance introduces its unique attributes in comparison with the conventional model since it indicates a distinctive case of an extensive decision-making paradigm that employs the tenets of Islamic social scientific epistemology that is founded on the divine oneness of god. Further, examining corporate governance within this paradigm makes it very essential since it encourages integrity, honesty, accountability, transparency, and responsibility among all the stakeholders in an organization (Siswanti, et al., 2017)

When it comes to the Islamic banking sector, it is evident that the majority of the researchers have abided by the good management theory via dependence on the organization's financial performance as the main dependent variable while business practices have been used as the independent variable (Hasan, 2009). Additionally, in the context of the effects, researchers have held the perspective of the stakeholder theory; assuming that there is a positive impact attributable to sustainable business practices on the performance of the organization in Islamic banking (Hasan, 2009).

## **Theoretical perspective**

According to Harrison & Wicks, (2013), stakeholder's theory created in 1984 by Freeman, seeks to deal with the issue of what or who matters. During the proposition of this theory, Freeman divided the stakeholder model into two core parts; the direct as well as the indirect stakeholders. According to the stakeholder's theory, the value of an organization tends to increase as the different stakeholders of the company are taken into consideration and their needs satisfied. An organization's stakeholders could include the individuals or groups impacted by the company's actions (Harrison & Wicks, 2013). In most instances, it encompasses the employees, customers, suppliers, financiers, trade associations, government bodies, communities, political groups, and the environment among others.

Haider & Iqbal (2015), in their article, argue that organizations address these different stakeholders via efficient sustainable measures coupled with their subsequent reporting. For example, local communities, employees and suppliers of the organization are taken into consideration via economically sustainable business measures besides reporting, as the economically sustainable measures tend to advocate for reporting of the minimum wage that is to be paid to the employees, enhancing investment in communities and further promoting and emphasizing on purchases made from the local

suppliers (Abu-Tapanjeh, 2009). The different stakeholders could be addressed via environmental sustainability measures like the economic sustainable business practices management tends to advocate for entity's compliance with the environmental laws that are created by the government, further expounding on the issues of waste management, recycling, energy consumption among others (Abu-Tapanjeh, 2009). Measures introduced to address the stakeholders as well as the subsequent reporting target the communities as well as environmental observers.

In the same way, the different stakeholders could be addressed via the introduction of socially sustainable business processes and management. The assertion is based on the fact that socially sustainable business dealings focus on elaborating on decent work processes, protection of human rights, safety, and occupational health (Haider& Iqbal, 2015). Overall, efficient sustainable business practices along with the subsequent reporting could address the interest of different stakeholders (Aggarwal, 2013). Besides, the stakeholders' theory assumes that when multiple stakeholders have been addressed, it ends up improving the performance of the company.

Ahamed, et al., (2014) proposed two theories that include the slack resources theory and the good management theory when arguing on the issue of direction of causality. In

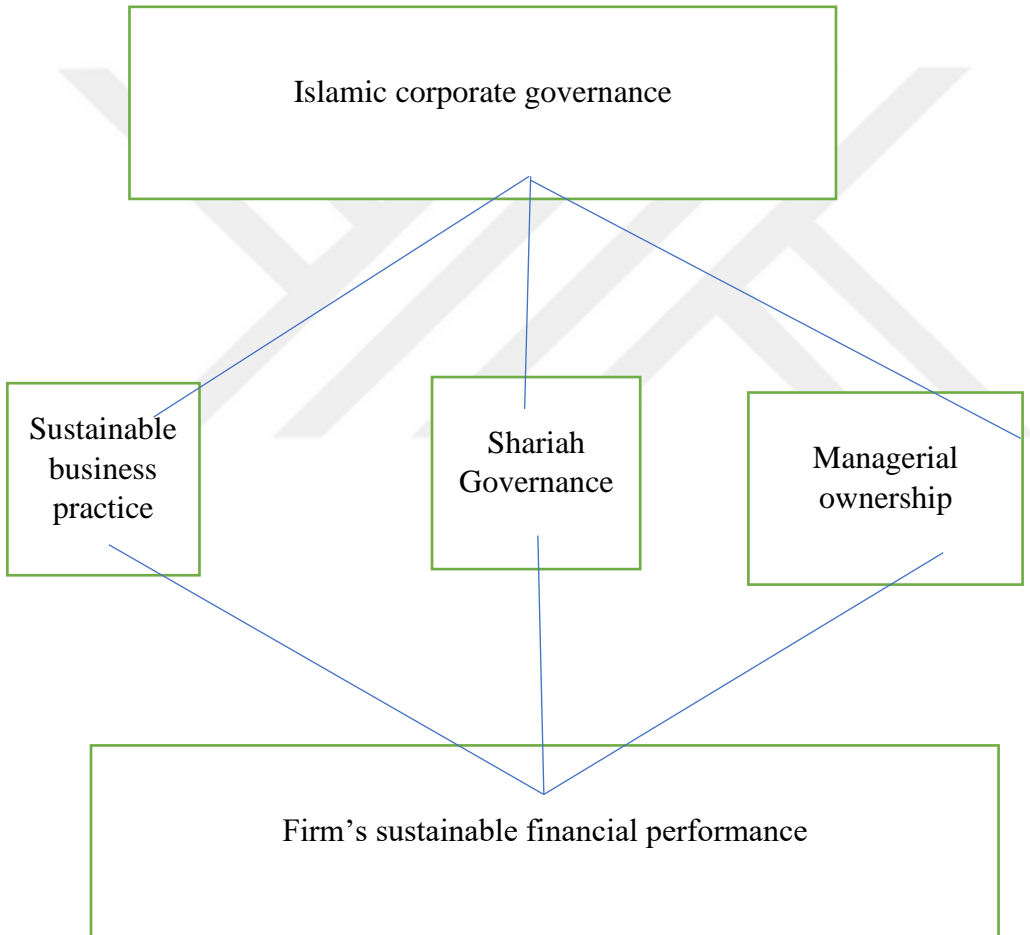
the slack resource model, the direction of causality tends to address sustainable business practices as the dependent variable while the financial performance of the firm is deemed to be the independent variable. The argument, in this case, is that the firm that has slack resources could choose to spend more finance on their sustainability interventions (Mollah & Zaman, 2015). Conversely, the good resource management theory asserts that the direction of causality tends to treat both sustainable business practices as an independent variable and the financial performance of the firm as the dependent variable (Kramar, 2014).

The model contends that a sustainability intervention that is undertaken by an organization serves to promote its reputation in the minds of the different stakeholders, an attribute that ultimately aids them to gain more financial rewards (Kramar, 2014). In the context of impact, the tradeoff theory assumes that the connection between sustainable business interventions and financial performance of a firm is negative although the model assumes a positive impact of sustainable business practices on the overall financial performance of the firm.

Concerning the Islamic banking industry, it is evident that most of the studies have relied on the good management theory whereby they use the bank's financial performance as the dependent variable while sustainable business practices

have been used as the independent variable (Kramar, 2014). Additionally, when it comes to the issue of impact, it is evident that researchers have been consistent with the perspective of the stakeholder's theory and make the presumption that positive impact attributed to the sustainable business measures on an organization's financial performance in the Islamic banking sector (Harrison & Wicks, 2013). Based on the available literature, the study abides by the tenets of the good performance model in the case of the direction of causality while borrowing from the stakeholder's theory when addressing the issue of impact on the enduring relationship.

## Theoretical model



Through this study, it will be possible to illustrate the impact that adoption of Islamic corporate governance has on the sustainability of the financial performance of an organization, Turkey which is a state that has predominantly adopted governance laws being the case study. This study implies that management and practitioners are going to have a platform with which they can employ in safeguarding and expediting the established targeted sustainable business interventions that will serve to enhance the sustainability of their financial performance. Thus, the study will be valuable for the experts of the global Islamic sector on matters of policy formulation.

### **Participants:**

The participants in this were 50 CEO and members of board of directors for firms in Turkey who are directly responsible for the execution of corporate governance as well as financial performance of their firms. These participants had to have held these positions for not less than three years during the period 2015 and 2019. The underlying eligibility criteria employed in selection of these participants were having been a member of board of directors CEO, a manager having at least 3 years' experience in these position that was attained in the course of the period 2015 and 2019. When it comes to

selection of the participants the researchers make sure that the individuals are knowledgeable of the issue at hand.

### **Research Method and Design**

During this qualitative multiple case study research, focus was to capture the accounts of human lived experiences from individual's perspective. Babbie (2010) asserts that qualitative case study design was selected since it offers an examination of the phenomenon under study, thus allowing the researcher to investigate the specific as well as complex issue in its real world context. The qualitative research methodology was adopted for this study since it offers the researcher the process that is appropriate for gathering the relevant subjective description of an issue or event from their informed perspective (Merriam & Tisdell, 2015). The focus of this study was to examine the underlying impact of Islamic corporate governance on the sustainable financial performance of firms in Turkey. The method involved sending questionnaire to a small number of participants, in this case CEO and Directors of firms in Turkey that had operated in the country for more than 10 years. These participants were selected using snowball sampling since it ensured only the participants with sufficient information on the question at hand were sampled.

## **The research method**

The goal was to examine whether Islamic corporate governance contribute to the sustainable financial performance of a firm, using the case study of entities operating in Turkey. Therefore, a qualitative methodology was appropriate for gathering information, meanings as well as interpretations. Qualitative research has been defined as a method that is employed to aid comprehension of individual and groups perspective towards a specific human or social challenge (Merriam & Tisdell, 2015). Through qualitative research, researchers manage to explore the meanings of human experiences, revealing the qualitative instead of quantitative attributes in these human behaviors and experiences.

## **The sample**

To get a clear picture of the state of Islamic governance and the impact it has on the sustainable performance of a firm, the researcher used purposive sampling to recruit sufficient participants with the required knowledge as well as expertise. Purposive sampling is one of the strategies by which samples collected include specific groups or parts of a population. The reasoning behind use of purposive sampling is the necessity to only use participants who had specific knowledge of Islamic corporate governance in Turkey. Further, these participants had to have specific experience and knowledge of ways of

integrating Islamic corporate governance in an organization as well as its impact on the overall financial performance of their firm.

The method involved sending questionnaire to a small number of participants, in this case CEO and Directors of firms in Turkey that had operated in the country for more than 10 years. These participants were selected using snowball sampling since it ensured only the participants with sufficient information on the question at hand were sampled. In this study 100 firms operating in Turkey were selected and through snowball sampling, 60 respondents who satisfied the eligibility criteria were selected.

## **Results**

The questionnaires that were sent to these respondents presented an assortment of themes and inclinations that are related to the rolling out of Islamic corporate governance in Turkey. The main themes that were under assessment in the questionnaire included:

### **The concept of corporate governance**

Analysis of the responses from these questions, the participants deemed corporate governance as the desire to ensure a balance has been created between a firm's shareholder

interest, those of the senior management executive, suppliers customers, the community among others. Additionally, it became apparent that the prevailing system of corporate governance that is adopted by firms in Turkey is dependent on the size of the organization whereby the small and medium size firms relied on the international governance system mechanism. Other sought to adopt internal mechanisms customized to their needs and created by experts and further approved by the board of governors on behalf of the stakeholders. Integration of corporate governance principles in a firms act was one of the attributes that was accepted by all the stakeholders whereby the firms declared in their annual report the degree of abiding of the governance principles.

### **Nature and purpose of the organizations**

While some respondents indicated that their firms were emphasizing on the integration of ICG in their operations, 90% indicated they had not explicitly indicated their corporate governance mechanisms as being based on Islamic corporate governance although it has been informed on ICG tenets as they sought to protect and safeguard diversity in their workforce and environment. Additionally, 85% of the respondents indicated that considering that most of their employees are Muslim and that they are working in a predominantly Muslim nation, their overall working

environment and social tenets allow them to become increasingly proactive, practical as well as efficient in delivering their objectives by observing ICG tenets.

### **The Islamic role of shareholders**

On the role that is exerted by stakeholders when it comes to application of ICG, the respondents indicated that as is the case in Turkey, all companies have been integrating the principles of governance that have been established by the capital market board since it is very clear of the fact that shareholders possess the right of information and can make follow-up of its application. The board of directors that is selected on behalf of the shareholders plays an integral role when it comes to application of governance policies. Transparency as well as accountability of the ICG has been indicated as the main ways in which the interests of the shareholders are advanced towards integration of ICG.

### **The composition and role of Islamic based boards**

When it comes to the assessment of whether the board is attaining the tasks founded on ICG, the respondents were in agreements that the boards of their firms were realizing the set objectives. On the question of whether the respondents felt that the board had an optimal balance of experts needed for

creation of an Islamic cultural-based successful organization, they indicated that their firms were working with experts in the field and ensuring they remained updated on the changes in the industry.

### **Discussion:**

The paper assessed the responses from managers and members of the board of directors of firms in Turkey, evaluating their understanding of the role of adoption of Islamic corporate governance and the sustainable financial performance of a firm. The analysis of questionnaire responses reveals there is a positive relationship between the adoption of sustainable practices and the overall financial performance of the firm, an indication that the management, as well as stakeholder performance, is essential. The themes are in line with the assertion that the performance of the management as well as shareholders is vital for the success of a company. The management as well as shareholders has accepted the fact that the creation of sustainable business practices by their firms adds financial returns to their portfolios.

Conversely, the relationship between sustainable business measures and the financial performance of the firm shows that market performance is not significant. Further examination seeking to comprehend why the market is reluctant for their firms investing in sustainable practices, the

study sought to analyse the moderating role of managerial ownership and shariah governance. Overall, it has been established that entrenchment of the management, as well as shariah governance supervision, exerts a positive impact on the market shareholders of Islamic banks for their sensitivity to the issue of sustainable business practices and the overall performance of the firm.

The attribute has been occasioned by the high management entrenchment that guarantees the integration of sustainable practices that positively impact the financial performance of the business. Further, it has been established that shariah corporate governance gives confidence to the market shareholders in obtaining superior financial returns via strong governance. This is occasioned by the fact that the shariah governance based on the SSB sizes allows professionals like economists even without much religious knowledge to sit on the board and offer expert perspectives on technical issues like sustainable financial performance.

## **Conclusion**

The study commenced with the sole objective of examining the impact that Islamic corporate governance has on the sustainability of a firm's financial performance, using Turkey as a case study. Overall, the corporate governance model results in an organization engaging in more sustainable

practices when the SSB has more scholars as well as people on its board. The study highlights the fact that the entrenchment of ICG in an organization tends to improve its overall financial performance.

### **Recommendations**

Islamic corporate governance is an integral component for the emerging world as well as the corporate structure of an organization in facilitating the transfer skills, training, controlling as well as financial management that will strengthen the monitoring, regulations and evaluation. Through assessment of integration of ICG, it will promote the reputation of corporate as well as help the employees and management of the firm since it established the rules and procedures that protect both the employee and employer.

### **Contributions**

The results of this study will offer insight to diverse stakeholders and policymakers of the Islamic organization to integrate the necessary sustainability measures in their business models and further addressing the balanced role that ICG acts as a connection between sustainable business practices and the overall financial performance of an organization.

## **Limitations and Suggestions for Future studies**

The study used Turkey as the core case study for studying the existing relationship between ICG and sustainable financial performance of a firm from an Islamic perspective. It however follows that comprehensive understanding of this connection would be better realized if other countries that have increasingly entrenched the ICG model in their operations are used. This because the concept of corporate governance is a novel approach in Turkey that is still developing and thus does not offer reliable information to be used and integrated by other stakeholders.

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