

The Effects of Religion on Economy: Comparison of a Capitalist Muslim Country and a Capitalist Christian Country

Auwal Yahaya Lawal

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Approval of the Institute of Graduate Studies and Research

Assoc. Prof. Dr. Ali Hakan Ulusoy
Acting Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Business Administration.

Assoc. Prof. Dr. Melek Şule Aker
Chair, Department of Business
Administration

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Business Administration.

Assoc. Prof. Dr. Melek Şule Aker
Supervisor

Examining Committee

1. Assoc. Prof. Dr. Melek Şule Aker

2. Assoc. Prof. Dr. Deniz İşçioğlu

3. Asst. Prof. Dr. Tahir Yeşilada

ABSTRACT

Even though nowadays religion may not be considered as an important factor for economic growth in capitalist economies, its characteristics of personal beliefs and institutions can be add-ins to economic and societal development. However, at the same time religion can also hinder or delay economic development. Investigating the relationship between religiosity and economic growth may present different results for different countries due to its diverse nature and due to different interpretations of religion in various cultures. Religious institutions and individuals can foster growth in an economy by improving the quality of human resource and promoting confidence in a society. Furthermore, some religious institutions and individuals can contribute to violence, restriction of capital accumulation and profit, which leads to a decrease in economic growth.

The main question of this study is whether religious beliefs have a positive or a negative impact on economic progress of capitalist economies. Based on the study of Indonesia and Mexico, empirical evidence, after conducting a multiple linear regression analysis, indicates that religiosity and economic development are negatively correlated in Indonesia. On the other hand, results reveal that there is an insignificant relationship between religion and economic growth in Mexico. The quantitative data used in this study is derived from The World Atlas database for GDP Per Capita income from the year 2000-2017. The three measures of religious commitment were sourced from various databases such as World Values Survey, Gallup World Poll, Pew Research center and International Survey Program.

In Indonesia it is suggested that religiousness should be encouraging idleness and not too much reliance on faith. In Mexico on the other hand, the players in the economic field have separated their economic activities from their religious practices.

Keywords: Religion, Economic growth, societal development, Capitalist economies, GDP Per capita income

ÖZ

Günümüzde din kapitalist ekonomilerde ekonomik büyüme için önemli bir faktör olarak kabul edilmeyebilir olsa da, kişisel inanç ve kurumların özellikleri ekonomik ve toplumsal gelişim için eklentiler olabilir. Ancak, aynı zamanda din de engelleyebilir veya ekonomik kalkınma geciktirmek. Güven ve ekonomik büyüme arasındaki ilişkiyi araştırmak, çeşitli kültürlerde dinin farklı olarak yorumlanması nedeniyle farklı ülkeler için farklı sonuçlar sunabilir. Dini kurumlar ve bireyler, insan kaynağının kalitesini geliştirerek ve bir toplumun güvenini teşvik ederek bir ekonomide büyümeyi iyileştirebilir. Ayrıca bazı dini kurumlar ve bireyler, ekonomik büyümenin azalmasına yol açan sermaye birikimi ve kârının şiddeti ve kısıtlamasına katkıda bulunabilir.

Bu çalışmanın ana sorusu, dini inançların kapitalist ekonomilerin ekonomik gelişmesine olumlu veya olumsuz etkisi olup olmadığını belirtir. Endonezya ve Meksika 'nın çalışmaya dayanarak, ampirik kanıtlar, birden fazla doğrusal regresyon analizi yaptıktan sonra, dini ve ekonomik gelişim Endonezya 'da olumsuz korelasyon olduğunu gösterir. Öte yandan, sonuçlar Meksika 'da din ve ekonomik büyüme arasında önemsiz bir ilişki olduğunu ortaya koymaktadır. Bu çalışmada kullanılan nicel veriler, 2000-2017 yılından itibaren her kişi için GSYİH için dünya Atlas veritabanından türetilir. Dini taahhütte üç tedbir, dünya değerleri anketi, Gallup dünya anketi, Pew Araştırma Merkezi ve uluslararası anket programı gibi çeşitli veritabanlarından kaynaklandığını.

Endonezya 'Da bu dini inanç ve çok fazla güvensizlik teşvik edilmesi gerektiğini önerilmektedir. Öte yandan Meksika 'Da, ekonomik alandaki oyuncular kendi dini uygulamalarından ekonomik faaliyetlerini ayırdılar.

Anahtar Kelimeler: din, ekonomik büyüme, toplumsal gelişim, kapitalist ekonomiler, her kişi İçin GSYİH gelir

DEDICATION

To My Beloved family

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Chapter 1

INTRODUCTION

Religion as an institution plays an important role in most societies. It is a global practice that shapes the way of life of many individuals. Therefore, it is rational to assume that it has economic, political and social implications that foster growth either positively or negatively on capitalist economies. While this possibility is interesting, analyzing its effects and comparison of various religion denominations is a complex task. The different characteristics and nature of different religious factions will most likely present different effects on economic growth. The result we got after doing a regression analysis indicates that there is a negative relationship between Religion and Economic growth in Indonesia.

The main question of this thesis is “How different religious beliefs effect economic growth?” To answer this question one Capitalist Muslim country Indonesia and one Capitalist Christian country Mexico are selected as examples. The religiosity in these sample countries are measured by the importance of religion (IMR), worship attendance (WAT), and frequency of prayer (FOP). These three observations were selected as independent variables of the multiple linear regression analysis employed in this study. The dependent variable is selected as the GDP per capita income representing economic well-being of the two countries. Thus, the analysis is expected to show the correlation between GDP per capita and religiousness of individuals in Indonesia and in Mexico. The results show that there is no correlation between

religiousness and GDP per capita income in Mexico, but there are negative and significant correlations between GDP per capita and importance of religion (IMR) and frequency of prayer (FOP) in Indonesia. The findings cannot be generalized for all Muslim countries around the globe of course. It may be interpreted that GDP per capita and IMR, WAT and FOP are negatively correlated in Indonesia maybe because people turn to religion as they become poorer and seek for conciliation in religious teachings. Maybe people turn to praying more regularly for better opportunities. In the abundance situation, the people may be relying on religion less. Thus, Islam could be helping in-need people to relieve their concerns in Indonesia. Of course more research is needed to shed more light on the relationship.

1.1 Effects of Religion on Economic Growth

There are many factors that come into play on how religion affects economic development. Human Capital is one important factor because education and the skills an individual acquires are crucial in societal development. Most religions encourage people to learn how to read and write the scriptures as it is seen as a way to glorify God. Hence, it plays a positive role in the development of society by increasing literacy rate.

Social capital, just like Human Capital plays a crucial role in economic prosperity. It motivates people to be involved in religious gatherings and events that promote trust and confidence among people. Fukuyama (2000) believes that the secret behind the phenomenal success of economies like Germany, Japan and the US is primarily due to spontaneous sociability and supremacy of trust, which are working together to increase social capital stock. Moreover, the intrinsic values of religion can strengthen

character traits such as trust, honesty, loyalty, thrift and hard work, which can all lead to economic growth.

Physical Capital such as machinery, buildings, equipment and computers also affect religion and economic growth, as work is also conceived as a means to glorify God. Therefore, religion encourages people to work hard in order to attain pleasures both from this world and the next. So basically, technological progress can help in the production and development of physical capital which leads to economic growth.

However, religion can also act as a hostile force to growth. When religious institutions try to restrict the flow in the capital market by boycotting some products and services and limiting the accumulation of capital. In addition, religious fanatics can also cripple the economy of a country when they engage themselves in self destructive activities like terrorism. Also, intense religious participation is being associated with low per capita income. A good example of how religion can negatively affect economic development is when religious norms interfere in the free market. For instance increased religious activities like building new cathedrals have a negative influence on financial capital expenditure.

1.2 Capitalism

Capitalism can be defined as a political or economic system where the trade industry of the nation and all factors of production (land, labor, capital and entrepreneur) are owned by private individuals and private enterprises mainly to maximize profit. Therefore, the government hypothetically does not interfere with production, trade nor religion. In a capitalist society all industries and other means of production are privately owned by individuals and firms, so that means that they are free to use their

resources whichever way they like and take any line of production that they see profitable. Therefore, Capitalism is a system of economic and political freedoms.

There are three different types of economic systems, which are the free market economy, command economy, and mixed economy. Capitalist societies have adopted the free market economy because the goods and services that are produced and the quantity in which they are produced is determined by demand and supply. In addition, the government does not interfere so that means entrepreneurs and marketers can reach their fullest potential by producing what they desire and what is most profitable. The only role the government plays is to encourage free and fair competition between private producers. Todd (2003) believes that capitalism is a logical economic system. However, he claims capitalism could hurt everyone (Todd, 2003). According to Todd (2003) even the wealthiest members of society can no longer enjoy their revenues, because a huge amount of payment is required from them to sustain their property. Additionally, Keskin (2012) argues that capitalism shows social predicaments and therefore, is far from perfect. These predicaments include standardization of our daily life and destruction of diversity. (Keskin, 2012)

1.2.1 Islam and Capitalism

The main question that usually arises is whether Islam is compatible with Capitalism.

So is Islam and economic progress fundamentally at odds with each other?

Compared to capitalism Islam does not concentrate primarily on the material aspects of well-being and maximization of profit. However, it focuses on the spiritual constituent of the well-being of all members of the human race. Therefore, Islam focuses on reducing the symptoms of unethical standards, for instance, family disintegration, interest and debt payment, drug addiction and conflict and crime. Capitalism, as well as Socialism, have both failed to lead mankind to such overall

well-being. However, there are some similarities between Islam and Capitalism. Islam actually accepts the market forces of demand and supply. Moreover, just like capitalism, Islam accepts the right to private property and privatization. Some scholars say, Islam is no stranger to the capitalist economy. Rodinson (1982) claims that Mecca, the birth place of Islam was a major capitalistic trade center. According to him the economy of the Islamic world bloomed after the revolution of the Abbasids until the fourteenth century, as Muslims at that time seized every profit seeking opportunity and calculated their expenses and revenues in monetary terms. Basically, they showed their capitalistic skills and potential. This argument leads us to suggest that Islam is by no means at variance with capitalism. In fact there are verses to support this claim from the Holy Quran:

- ❖ “O you who believe! Do not devour your property among yourselves falsely, except that it be trading by your mutual consent; and do not kill your people; surely Allah is Merciful to you.” (Nisa’a 4-29).
- ❖ “And give full measure when you measure out, and weigh with a true balance; this is fair and better in the end.” (Isra 17-35).

These verses illustrate how business should be conducted fairly according to Islamic law.

Characteristics and examples of Muslim Capitalist countries are as follows:

Rights to ownership of property, optimum utilization of resources, and efficiency of production are all features of a capitalist nation. Examples of some Muslim capitalist countries are Indonesia, Saudi Arabia, Kuwait and Turkey.

1.2.2 Christianity and Capitalism

Capitalism has always had its roots in Christianity. The first instance when capitalism was recognized was in the Roman Catholic Church when they justified economic life and then began to put it into practice. Some sociologists believe that the church was the first place to put the rule of law into practice. Moreover, some see it as system that resolves conflicts rationally turning it into an economic market place. Furthermore, the first specialized and mobile labor force was created by the church to create an investment strategy for physical and intellectual capital which will be passed on from generation to generation. Physical capital encourages people to work hard which leads to higher productivity, the role of human capital is also crucial in a capitalist society because it is not possible to have a private enterprise or understand the way the financial system operates without investing in human capital. Therefore, intellectual knowledge has to be passed on to the younger generations in order to keep the economy flowing. Without education and knowledge the human race will surely enter into a phase of complete ignorance which is very dangerous.

Even though, the Bible does not mention capitalism directly, it does emphasize on economic issues and also evaluates the success and failure of the economic system by providing descriptions about human nature. In Genesis 1:28 which is the Old Testament, God says “we are subdue to the earth and dominion over it”. It may be interpreted as humans can own property and exercise their superiority over nature. This attitude led to excessive use of natural resources and polluting the environment in today’s world. One of the biggest flaws of capitalism is that it favors the elites of the economy and abandons the less privileged meaning the rich get richer and the poor get poorer. This unequal distribution of wealth is believed to be a problem of

greed which is why many Christians feel unsure about the free enterprise system. Some critics say that the foundation of capitalism is built upon greed and that capitalism and Christianity are fundamentally contradicting each other.

Characteristics and examples of Christian Capitalist countries are as follows:

Christian and Islamic capitalist countries have similar characteristics, such as freedom of enterprise, sovereignty of consumer, price mechanism.

Some examples of Christian majority countries that practice capitalism are: Mexico, USA, Canada, France and Italy just to mention a few.

Chapter 2

LITERATURE REVIEW

In this chapter, some of the previous studies about the relationship between religion and economic well-being are studied. After full literature review and critical evaluation from previous articles relevant to the topic, a theoretical framework was developed.

The main question of this review is whether religion has a positive or negative impact on economic activity and researchers have found that there are many variables, factors and indicators that play a major role in determining whether the relationship between religion and economic growth is a positive or a negative one.

2.1 Religion and Economic Activity

Boulding (1968), believes that since the inception of religion, it had affected the nature of goods that are related to economic activity and also religion had affected the institutions and business practices that have determined the entire economic course. According to him, religion has built the pyramids, the cathedrals and temples and became an important center for economic activities. (Boulding, 1968)

According to Von Mises (1949) religion helped in establishing the human society. The idea of owning physical capital has been dominated by the theory of economic growth. In this regard, the models of Solow (1956) and Swan (1956) show that economic growth rate increases population and technological progress. Extending

this idea, Khan and Bashar (2008) believe that religion through its norms can have a positive effect on fertility and also have an influence on labor productivity because for some religious beliefs, work is the norm, also under some religious aspects, work can be conceived as a mean to glorify God. Religious factions that focus more on the 'life beyond' may likely lead to low social status and may have a major negative impact on trade, business and entrepreneurs whose activities are prioritized in 'this world' (Boulding, 1968). At the same time, such religions can give Monks who are basically inactive and contemplative people, high status whose economic work is usually based on consumption. Social Capital, like Physical Capital, is an indisputable factor in economic growth and religion. According to Von Mises (1949) personal well-being is impossible to achieve without others. In supporting this theory, usually the feeling of belonging to a particular group or religious faction can subconsciously motivate an individual to behave accordingly, especially among cultures that promote sociability and not individualism. Khan and Bashar (2008) state that religion acts as a catalyst to build social capital and therefore increases economic growth. Increase in Church or Mosque attendance may assist in building networks which usually plays a part in societal development because these religious temples are perceived as places of purity and peace, which contribute to the development of an economy. Therefore, religion acts as a catalyst to build social capital. As Smith (2010) opined, individuals who participate in certain religious factions may send to their advocates two economic advantages. First, a feeling of belonging to a good group which may reduce the risk associated with specific individuals and eventually lead to a better resource allocation. Secondly, religious groups can provide legal means to establish trust and punishing culprits, through interactions within the group, in order to reduce uncertainty and increasing

efficiency. When the necessary institutions for carrying out international trade are missing, networking comes into play. For instance, Greif (1989) pointed out how small Jewish communities of merchants that have dispersed across distant cities and countries conduct business through strong mutual trust. In addition, Religion can also have a positive implication on Human Capital through improvement of education. According to Becker and Woessmann (2009) in the world of Protestant domination, religion played an important part in the development of Germany. Literacy was induced as people were taught to read and write the words of God. In many types of religious beliefs, God is perceived as the ultimate knowledge and wisdom, in this regard believers are taught to read, listen and think about what symbolizes wisdom.

According to Kurantin (2013), religion is manipulated by the ruling class as to suppress the working class as they extract surplus value. The ruling class forces workers to work for long hours with low wages, while collaborating priests tell them that they will be rewarded for their suffering in the hereafter. It is also argued that the trend toward modernization of culture and economies of metropolitan region is the reason for decline of religion in modern times. However, Weber (1913) believes that religion plays a major role in the economic well-being of people, for instance it fosters traits of trust like hospitality, loyalty, and thrift. De Noble, Galbraith, Singh, and Stiles (2007) assume that individuals with extrinsic religious backgrounds have a positive perspective of the market exchange which motivates them to self-employment. In addition, according to Allport and Ross (1967) extrinsic values emphasize on endorsement for oneself and solace social standing. Allen and Spilka (1967) believe that intrinsic values emphasize unity and brotherhood. The role of religious rituals in promoting cooperation and trust within a religious group was studied by Ruffle and Sosis (2003). According to them religious rituals increases

collective productivity. Ruffle and Sosis (2003) concluded in their study that religion plays an important part in people's lives that live in small towns, whose survival depends on solving collective problems.(ibid)

On the other hand, religion can cause economic growth and societal development to deteriorate, especially when religious leaders or institutions are extreme and try to barricade growth. A study by Guiso, Sapienza, and Zingales (2003) states that civil unrest and religious extremism may erupt between different religious groups or people from the same group which can give rise to violent behavior. Such despicable behaviors can lead to lower Foreign Direct Investment or sanctions on the country which eventually effects growth. However, Krueger (2007) argues that religious violence is an episode that occurs because of poverty and the gap between social classes in a country. A secular terrorist views violence and anarchy as a mean to political end, therefore, the secular terrorist seeks to renovate the system and not to completely abolish it. By contrast the religious terrorist views violence as an end, and not means for economic and political ends. Hence, the religious terrorist sees himself engaging in the destruction of society. Furthermore, Berman and Laitin (2008) explain the "dark side" of religion as they elaborate on why religious sects enter into a destruction mode until they destroy themselves and their environment, by showing that radical religious groups provide goods to their members who live in failed states with poor economic conditions. What appears to be voluntary violence, turns out to become a mechanism for keeping their advocates in the sect.

R. M. McCleary (2008) points out other negative effects of religion when there are limitations of religious nature on credit markets, interest receipts, profits and capital accumulation. It was also found that constructions of new cathedrals increases

financial resources therefore, creating problems of scarcity on the financial stock of the free market.

Lewer and Van den Berg (2007) argue that the direct effects of strict border controls, perceived risk of supply chains, and security costs has discouraged trade and global economic integration. The extent that religious extremism encourages countries to isolate themselves from the world will restrict globalization (Lewer & Van den Berg, 2007). Religion is not always perceived as a negative factor in the global economy. A Social institution like religion encourages exchange, specialization and social behavior. However, Brooks (2003) argues that we do not fully understand the role of religion in our fast growing globalized economy. The relationship between international trade and religion is complex and economic theory does not give us undeniable answers. Most of the world's major religions discourage giving into your desires to pursue short term happiness, they focus more on spirituality of the soul, and this indicates that religion suppresses some incentives for people to engage in activities promoting social economic growth. Also, religion can hinder international trade specifically when it discourages commercial activities that disrupt the market forces of demand and supply. On the other hand, Religion often promotes diligence, honesty and economically friendly behavior that enables people to specialize in different countries and exchange goods and services.

Smith (1776) believes that religious activities and beliefs are rational choices people make. Individuals choose a religion and the degree to which he or she participates or believes in. Moreover, Smith (1776) strongly believed in the dissociation between the state or the government and church. Showing no preference of one religion over

the other which allows all religions to be practiced, the lack of government intervention opens up a door for rational discussions about religious beliefs.

R. McCleary and Barro (2003) found out that overall development based on the Gross Domestic Product per capita income decreases religiosity. Evidence suggests that with increased income, people tend to become less religious. The findings of this thesis supports this claim by these past authors (R. McCleary & Barro, 2003). Bénabou, Ticchi, and Vindigni (2015) in their study examined the relationship between five measurements of religiosity such as identifying oneself as a religious person, belief in God, Importance of Religion, Importance of God in your life and Church Attendance to eleven attitudinal measures of openness to trade such as; imagination, independence in children, technology, attitude towards science, risk taking, and change just to mention a few. They found a significant negative relationship between religiosity and innovation, where innovation is measured by patents per capita. On the other hand, Sanmuelsson (1961) and Cohen (2002) in their studies found that there is no logical reason that religion can cause economic growth or there is inadequate empirical evidence to support the claim that religion and economic activity work hand in hand. This can also be proven by our findings for Mexico where there is an insignificant relationship between Religion and economic growth.

Hillman and Potrafke (2018) investigated whether religion affects economic freedom. Cross-sectional dataset that includes 137 countries averaged over the year 2001-2010 was used to carry out a simple correlation for three religious groups. The results reveal that Protestantism is associated with economic freedom and Catholicism is in between. Islam on the other hand, is not associated with economic

freedom. Under the title “World Values Study” how religion plays a crucial part in people’s lives was studied in the year 2000. A study was conducted by Inglehart, Basanez, Diez-Medrano, Halman, and Luijkx (2000), and they found that 83% of the people surveyed in the world believe in God, 75% believe in the existence of Heaven and Hell, 26% attend a place of worship at least weekly and 36% once a month. More than 65% of the individuals that were surveyed felt closely related to religious beliefs because they felt that it keeps them grounded. However, 7% of the people surveyed do not affiliate themselves with any religious beliefs and regarded themselves as atheists. Moreover, Barro and McCleary (2003) also conducted a survey about belief in heaven and hell and found out that the percentage believing in heaven and hell are 99% in Indonesia, 98% in Iran, Nigeria, Turkey and Pakistan with 94%. Furthermore, it was concluded that Muslims are more likely than Protestants, Buddhists, Catholics and Hindus to believe in heaven and otherworldly compensators are more crucial in Islam compared to any other religion. (R. M. McCleary, 2007).

2.2 Islam and Economic Activity

Campante and Yanagizawa-Drott (2015) studied the economic effects of religious practices in the context of fasting during the month of Ramadan as it is one of the central tenets of Islam. They exploited changes in the length of fasting due to the rotating Islamic calendar to establish causality. The results claim that longer fasting hours is associated negatively to economic output because time and resources are consumed during fasting which leads to lower productivity. However, it is found that fasting increases happiness and well-being of individuals in the countries that were analyzed because it is something spiritual that Muslims believe in. (Campante & Yanagizawa-Drott, 2015).

According to Kato (2014) in Islam “all property belongs to God” in principle as far as property is involved. God has given every single individual the right to possess personal property. However, there is a limit to what can be owned by an individual, for instance, Mountains, rivers, forests are created for the public. Zarabozo (2008) argues that Islam creates and encourages mass enforcement of religiosity among groups, he also argues that the Quran condemns the consumption of interest. It is mentioned in Surah al Baqara which is chapter 2, verse 275 from the holy book: “those who consume interest cannot stand on the Day of Resurrection except as one stands who is being beaten by Satan into insanity”. Similar attitudes towards consumption of interest exist also in the New Testament, but Christian countries do not implement it. By not using interest, some societies may halt the development of the financial sector in that country. Warde (2000) defines Islamic finance as, all financial practices which their operations and objectives are based on Qur’anic principles. The worldwide spread of Islamic finance has transformed Muslim countries’ financial system. Analysts have always argued that the primary users of Islamic financial products are the pious Muslims. According to Gait and Worthington (2008) a large market segment of pious Muslims has not been untapped yet.

Due to a number of factors, Islam has struggled to generate positive effect towards networking. (Guiso et al., 2003) Surveys reveal that compared to other religious followers, Muslims are the most anti-market group. Paldam (2001) states that countries that majority of the population is Muslim tend to have above average levels of corruption, something they have in common with Catholics. Moreover, Islam’s prohibition on consuming interest may have some drawbacks on international trade which is often undertaken by long-term contracts and credit.

The question that usually arises is whether, Islam can offer a solution to the contraction of influence of religion in a society? To answer this question Huntington (1996) states that at the time of economic growth, Muslims like to show and emphasize on their religiosity as they see their faith as hope, power, stability, legitimacy, development, meaning and a “source of identity”. He also states that the rejuvenation of Islam is what makes it survive in the modern world but still a clash usually arises between the West and Islam. He also argues that, Islamic resurrection in its depth is the latest phase in the balancing of Islamic civilization which is finding a solution in Islamic ideology and not the Western ideology. (Huntington, 1996). So basically it rejects Western culture and accepts modernity, and recommitment to Islam as a guide to life in the modern world.

Sustainable development is well known as the situation wherein the development succeeds in meeting the needs of present time without compromising the future generation’s needs. Brundtland (1985) claims that ethical aspects derived from Tawheed (Monotheism) such as justice, environment, moral consideration and equality are induced in the decision-making process regarding every activity related to sustainable development. The positioning on marginal consumption, production, environment consciousness, and capital consciousness lead to issues of depreciation.

As mentioned by Al-Haritsi (2006) a story about how Umar Ibn Al Khattab, one of the companions of the Prophet (PBUH) ran the economy during his tenure can be an important lesson. Umar’s policies proved that the realization of Islamic ecosystem successfully made the government and the people take actions with respect to the future. He set a good example that in order to manage sustainable economic

development; Tawheed and social consideration have to be included. And, as a result, the human well-being during his time improved

2.3 Christianity and Economic Activity

The father of “the invisible hand of the market” Smith (1776) argued that the unfavorable economic progress is due to the authoritarian practices of Roman Catholic Church which impose restrictions on international trade. Thus, some Christians started criticizing some of the past practices of Christianity that were taught centuries ago.

Religion as a factor of economic growth was first introduced into mainstream literature over a hundred years ago by (Weber, 1913) who underlined the ambitious role religion played in social development, developing a theory which states that the Protestant Reformation was crucial in the surfacing of capitalism due to its impact on traditional belief system. However, according to Wallerstein (1974) who was skeptical about Weber’s theory, says that religion would guide the appearance of the capitalist economic system. In addition, he claims that any link between economics and religion would produce a just economy.

Guiso et al. (2003) studied the impact of religion on people’s attitudes towards legal compliance, cooperation, and government in relation to free market. Not only was the impact of religion studied, but also of certain religious affiliations analyzed by him (Guiso et al., 2003). In the study a sample of 66 countries that represented 80% of the world population was used (ibid). On the average it was found that religion in general has a positive correlation on developing good institutions (ibid). Hence, Protestants and Catholics who go to the church often seem to be the most reliable

people (ibid). The relationship between religion and intolerance seems to exist in most religions; it is particularly strong among Muslims and Jews. Therefore, the results are not adequate enough to conclude that some religions are more unfavorable to economic growth than others. Weber (1913) in his book: *Protestant Ethic and Spirit of Capitalism*, explains how religious Protestants are compelled or forced to follow a more profane profession with as much excitement as possible. Thus, a person with such mindset is more likely to accumulate wealth. Protestantism according to Weber forbids squandering of resources and hard earned money; rather, it encourages investments that yield to dividends and savings.

According to Lewer and Van den Berg (2007) the Roman Catholic culture has a significant negative effect on bilateral trade between countries. Also R. M. McCleary (2007) claims that because of the ease to amend bad deeds for Roman Catholics and Muslims, she concludes that these two religions are less likely to generate mutual trust among individuals.

Paldam (2001) and Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) found that all other things being equal, countries who have a high population of Roman Catholics have higher levels of corruption. The study indicates that the culture of Catholics does not enforce contracts, encourage trust and does not enforce agreements necessary for international transactions.

Regression analysis conducted by R. McCleary and Barro (2003) claim that, high level of church attendance signifies that the religion sector is less productive. More resources like time and capital are being consumed in the expense of societal productivity. Thus, high church attendance would show up as negative effect on

economic activity. This finding is also similar to the results of this thesis, where in Indonesia worship attendance and GDP Per capita are negatively correlated.

A different perspective was presented by Sacerdote and Glaeser (2001) and Putnam (2000) who argue that places of worships are as important as national organizations or institutions. That means the interactions and networks cultivated by the Church are important elements of social capital. Church attendance might have a separate positive impact on economic development. Church attendance might also act as a surrogate or an agent that influences organized religion on policies that effect economic motives. Iyer (2010) stated that in order to unveil a policy-making process that fosters economic growth, a greater understanding of Church regulations, religious structures, and welfare programs regarding faith is needed.

Christianity has found a fruitful ground to strongly exercise spiritual leadership in Latin America. Stoll (1982) states that the influence of religion has made privileged elites search for identity and inspiration from it. Moreover, according to Stewart-Gambino (1989) in the 16th century Spanish colonizers spread Catholicism which served as one of the most important and vital institutions. It is sharply contrasting to the Protestant wave that was pierced into the Anglo Saxon nations. A poll of 17 countries in Latin America was conducted by Gill (2004) and according to the author, consistent with its principles, Protestantism encourages free trade, free enterprise and other characteristics of capitalism. Despite the fact that Protestantism and Catholicism promote hard work and accumulation of wealth, Protestant Christians seem to be more positive and entrepreneurial than Catholics. After studies and analysis of Latin American nations, Ortiz (2009) concluded that religion does play an important role in the long-term growth of capitalistic societies by changing

the perspective of how people look at material wealth, which is a sign of spiritual growth. So basically Catholicism showed positive signs between religion and economic performance in all Latin American countries except for Uruguay where Protestantism prevails.

2.4 Islam and Economic Growth in Indonesia

Indonesia which is the world's most populous Muslim nation and also the largest economy in Southeast Asia has a GDP growth rate of 6% or higher between 2010 and 2012. Due to increase in government spending, private consumption and an increase in fixed investments the economy grew by 5.27% in the second quarter of 2018. In addition, Indonesia is the world's sixteenth largest economy in 2018 according to reports from World Bank.

Despite the great amount of Muslims in the country, it still remains to be a secular nation without the implementation of Islamic law (Sharia). Their economic, social and political systems are similar to the ones in the West.

Free market, popular vote, right to property and freedom of choice are all features of the Indonesian society. Regardless, Indonesians are proud of their religion, diverse cultures and long history. Islam seems to be a force that keeps them grounded and humbled. Islam is constantly looked at for guidance in relation to customary greetings among people and also social behavior (Kato, 2014).

In an interview conducted by Kato (2014) he states how a young cleric Muslim called Yusuf Mansur in Indonesia conducts his business. Yusuf explains that in Islam and Economy there are three elements. First having good intentions, he states that his main priority is not making money but rather giving back to the people which is only

possible through worshipping Allah alone. Secondly, the method of conducting business. Contrary to the West, who conduct their business with written rules and regulations, he claims Muslims do not need to be formal; they do business from their hearts. And finally, he mentioned “purpose” of doing the business; he believes that Muslims should do business in order to enter heaven. He bases his attitude to the quote from the holy Quran:

- ❖ “But seek, by means of that which God has given you, to attain the abode of the hereafter. Do not forget your share in this world. Be good to others as God has been good to you, and do not strive for evil in the land for God does not love evil-doers.” (Al-Qasas: 28-77).

The important message that was derived from the verse is the importance of maintaining social solidarity among Muslims.

In Indonesia, Islamic Institutions consist of banks with their diverse areas and scope. According to Ismal (2013) as part of Indonesia’s financial institutions, Islamic Banking has already provided its own financial services by sticking to its Islamic principles and values. However, it restricts some common practices of the conventional financial system because it is strongly attached to its Islamic principles. It has been a positive agent as the financial intermediary, towards Indonesia’s economic growth. To accelerate the growth of Islamic banking in the country Indonesia (2007) bank Indonesia came up with a mechanism to strategically increase the stability of the banking system, by increasing the sharia compliance, and increasing operational efficiency and competitiveness and also optimizing the social roles of Islamic banking in developing small and medium enterprises.

2.5 Christianity and Economic Growth in Mexico

Hamnett (2006) states that historically Catholicism has been the most important and practiced religion in the Mexican society. Its influence began in 1519 when Hernan Cortez taught Christianity to natives through sermons as well as rituals. However, in the 19th century its supremacy decreased due to the emergence of anticlerical and liberal perspectives. In Mexico, Catholic institutions owned charitable organizations, schools, hospitals, and a large number of properties. Therefore, liberals viewed it as an independent state.

According to Camp and Camp (1997) the first religious war broke out in 1857 between Benito Juarez's regime and those who were trying to protect Catholicism, when his constitution abolished some governmental privileges that were enjoyed by the clergy.

The constitution was to blame again for causing another religious war in 1917, because privileges held by the Roman Catholic Church were further decreased. The Church started to enjoy legal status again in 1992 when all restrictions to the Church were removed to establish a better relationship with the Catholic Church. Nesvig (2007) states that despite the government's efforts to reduce the Church's influence on society, the Roman Catholic Church has continued to be a strong cultural component in Mexico.

Furthermore, Gill (1999) states that after the constitutional reform in 1991 by President Carlos Salinas and the chamber of legislatures, the new legal status was highly appreciated by the leaders of the Roman Catholic Church who have been trying to obtain legal recognition and freedom for years. The leader who spearheaded

the Church's movement to obtain legal status throughout the 1980s and 1990s applauded the administration's efforts for opening new horizons in the relation between Church and state, transmitting the forces of two institutions towards the service of religious and social peace that the country has been yearning for.

According to Grubb (1935) none of the great churches of Christendom has escaped the threats of destructive opposition. In Russia for instance the Orthodox Church was under fire and just in Germany a sword was driven into the soul of Protestant Christians and in Mexico the Roman Catholic Church was pressured to abide by the constitution that stripped them off their privileges in the society.

Like other countries in the continent, Mexico, changed from a Catholic society to a more diverse one in time. As a vivid example, the protestant population grew from 0.4% to 5.2% in 2002. Gross (2003) claims that Protestantism has improved modernization and democracy, ideological pluralism and equality between male and female especially among the rural communities. So it's suggested that the religious change that was brought about has had technological, legal, social, economic and political implications in Mexico.

Chapter 3

METHODOLOGY & ANALYSIS

To test the hypothesis of the impact of religion on economic growth, we use SPSS to employ the multiple linear regression models for determinants of religious practices and economic activity for two countries Indonesia and Mexico. Those two countries are selected, because both of them have large economies, highly populated and religious. For both of them petroleum is an important resource. Also both of them are higher-middle income countries in where religious institutions play an important role in the daily lives of citizens, including economic activities. In addition, Indonesia has the highest population of Sunni Muslims where 87.18% of the population identify themselves as Sunni. Mexico has the second highest population of Catholics in the world after Brazil with 85% of the population who self-identify themselves as Catholics while in Brazil only 65% are identified as Catholics. The linear regression model has been widely used in previous empirical studies to test and analyze the relationship between variables because they explain cross-sectional variation. The model presets a framework to explain the influence of independent variables on the dependent variables and how they correlate with each other.

Gross Domestic Product (GDP) per capita is used as the dependent variable to measure economic well-being. Importance of religion (IMR), Worship attendance (WAT), and Frequency of prayer (FOP) are used as independent variables

representing the religious activities and commitments of individuals in the two samples.

3.1 Dependent Variable

3.1.1 Gross Domestic Product (GDP) Per Capita Income

GDP Per capita income can be defined as the Gross Domestic product divided by the number of population in a specific period of time. Basically it measures a country's GDP per person. The reason why GDP per capita income was chosen as a measure of economic well-being is because we are trying to find out the effects of religiousness of individuals on economic growth, also because of availability of data from the World Atlas database from the year 2000 to 2017.

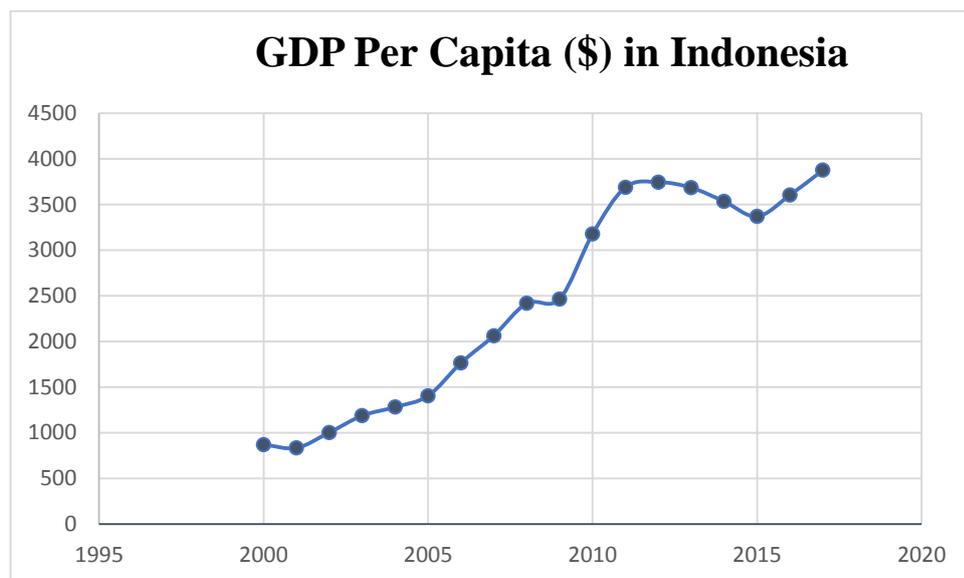


Figure 1: GDP per capita in Indonesia

As the above figure 1 illustrates, in the year 2000 per capita income of Indonesians was \$870. Per capita income keeps on increasing until the year 2012 where it reached \$3,745. However it decreased by \$376 by 2015 and then it reached its record highest by 2018 reaching up to \$3,876.

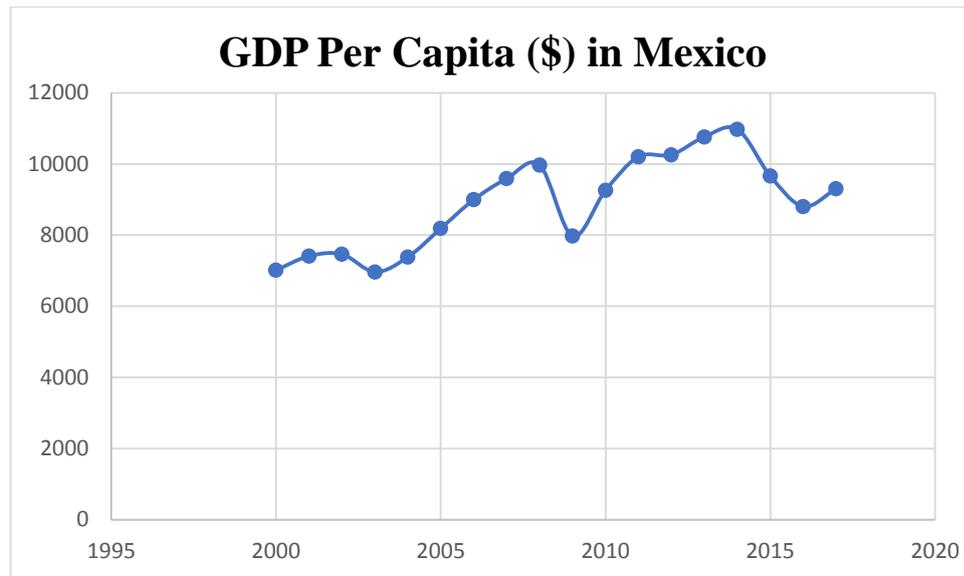


Figure 2: GDP per Capita in Mexico

In Mexico on the other hand, per capita income fluctuates over the years. For instance, as observed in Figure 2 it was \$7,016 in 2000 and then there was a slight increase in 2001 and 2002 and by 2003 it reached its lowest which was \$6,965. However that number increased from \$7,383 in 2004 to \$9,973 by 2008 and then it dropped to \$7,975 in 2009. The trend started to increase from 2010 to 2014 where it reached a record high of \$10,979 and then there was a decrease of \$2,172 in 2016. However, per capita income increased from \$8,807 in 2016 to \$9,304 by 2017.

3.2 Independent Variables

In this study we use three standard measures of religious commitment. The used data were sourced from Pew Research Centre, Gallup World Poll, International Social Survey Program and World Values Survey.

3.2.1 Importance of Religion

This can be defined as the percentage of people that believe religion is an important or very important aspect in their lives. Importance of religion was chosen as a measurement method because of the intrinsic and extrinsic values of religion that can cause societal development.

Figures 3 and 4 illustrate the description of the importance of religion for Indonesia and Mexico respectively.

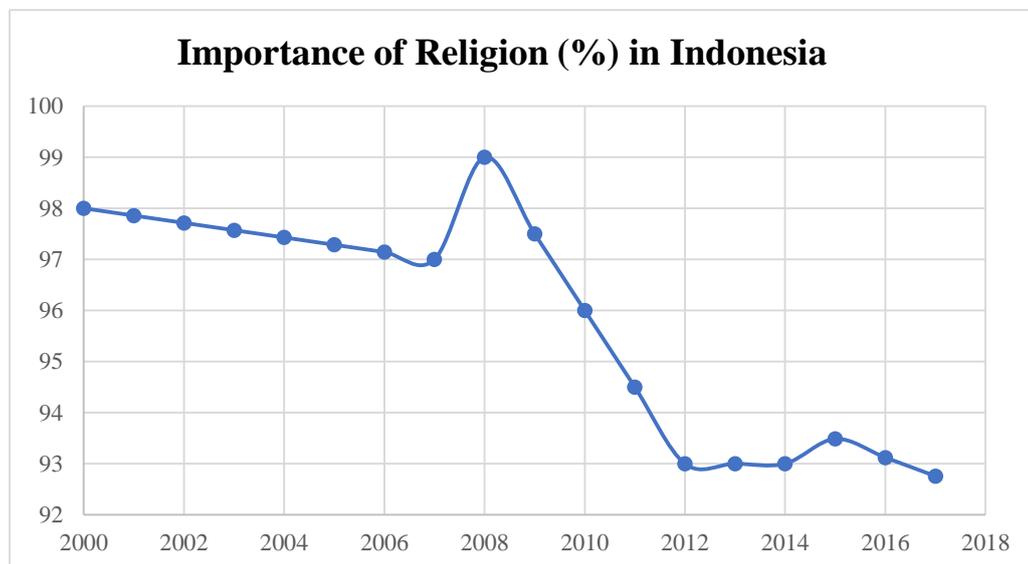


Figure 3: Importance of religion in Indonesia

Figure 3 for Indonesia shows that there's a decrease in the importance of religion from 98% in the year 2000 to 97% in 2007. And then there was an increase from 2007 to 2008 reaching 99% due to economic crisis. The negative relation between GDP per capita and importance of religion (IMR) is also observed in figure 3, because IMR increases as economic crisis in 2008 deepens. The importance of religion started to decrease from 99% in 2008 to 93% in 2012 and then to its lowest in the year 2017 with 92.76% of people believing that religion is an important aspect

in their lives due to an increase in GDP per capita, globalization and rise of other religious denominations in the country.

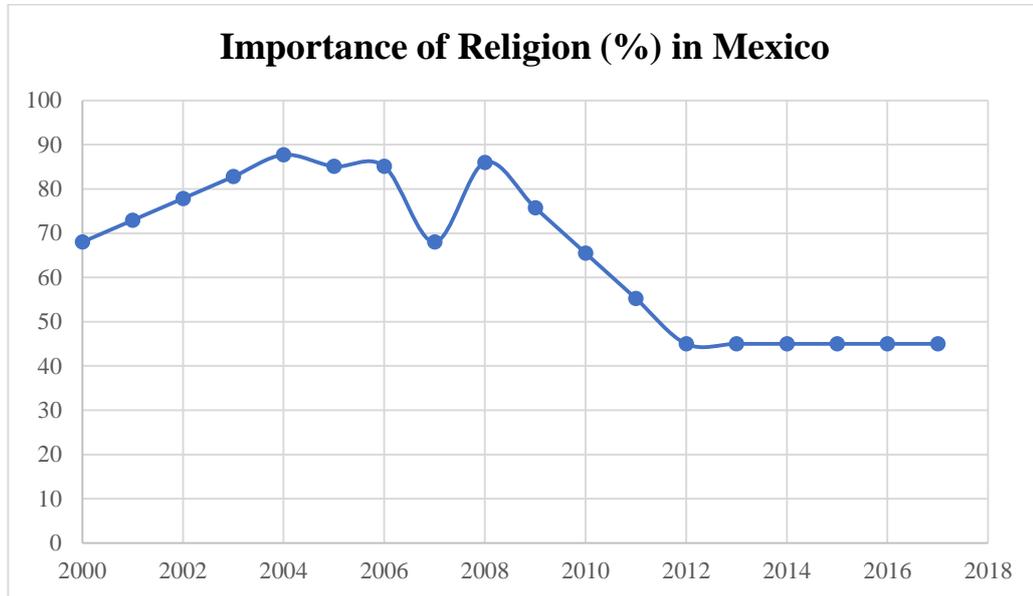


Figure 4: Importance of Religion in Mexico

Figure 4 illustrates the Importance of Religion (IMR) in Mexico. It shows that 68% of the Roman Catholic population in Mexico believes religion is an important aspect in their lives in the year 2000. There was an increase of 19.7% from 2000 to 2004. By the year 2007 the amount decreased to 68% and then increased to 86% in 2008. However, there was a rapid decrease from 2008 to 2012 where it reached its minimum low of 45% due to some economic factors, the trend continued until 2017. Although in the multiple regression analysis that was carried out for Mexico, no significant correlation is observed between GDP per capita income and importance of religion in Mexico, the rise of IMR, during the financial recession in 2008 as observed in Figure 4 is worth nothing.

3.2.2 Worship Attendance

Worship attendance (WAT) as a measurement of religious commitment can be defined as the percentage of individuals that attend religious services. For instance it measures the percentage that go to the mosque once or more than once a week and also the percentage of people that go to church at least once a week. This method of measurement was chosen because based on past studies, it is believed that high church attendance hinders economic growth and in some cases it fosters growth, so this measurement is used to see whether this claim is true or not for Indonesia and Mexico.

Figures 5 and 6 show the description of Worship Attendance for Indonesia and Mexico respectively.

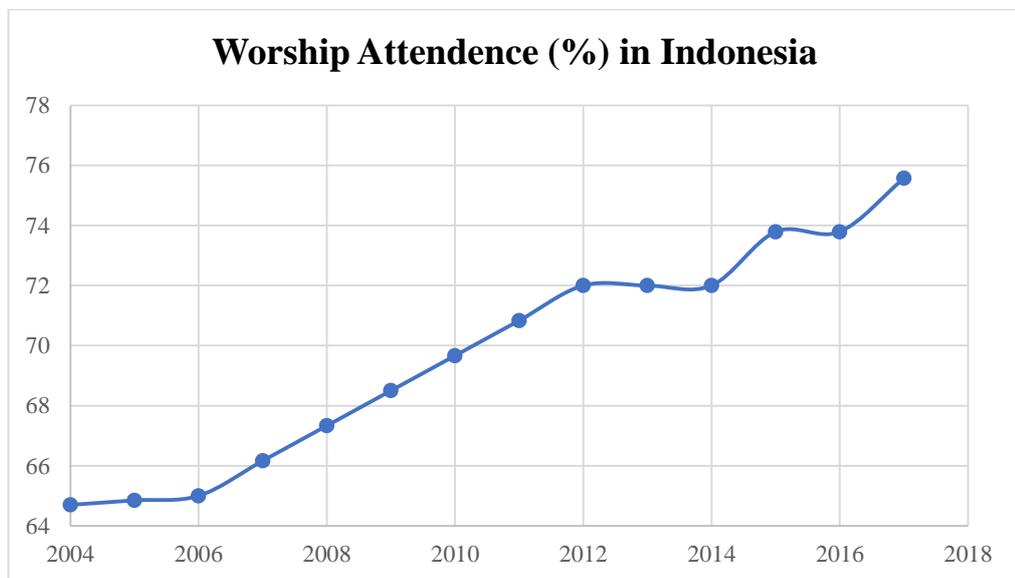


Figure 5: Worship attendance in Indonesia

Worship attendance as illustrated in figure 5, was 64.70% in 2004 which was the lowest and then started to increase from 2005 to 2012 where it reached 72% until 2014. And by the 2017 the amount of people that go to the mosque at least once a week reached a record high of 75.57%.

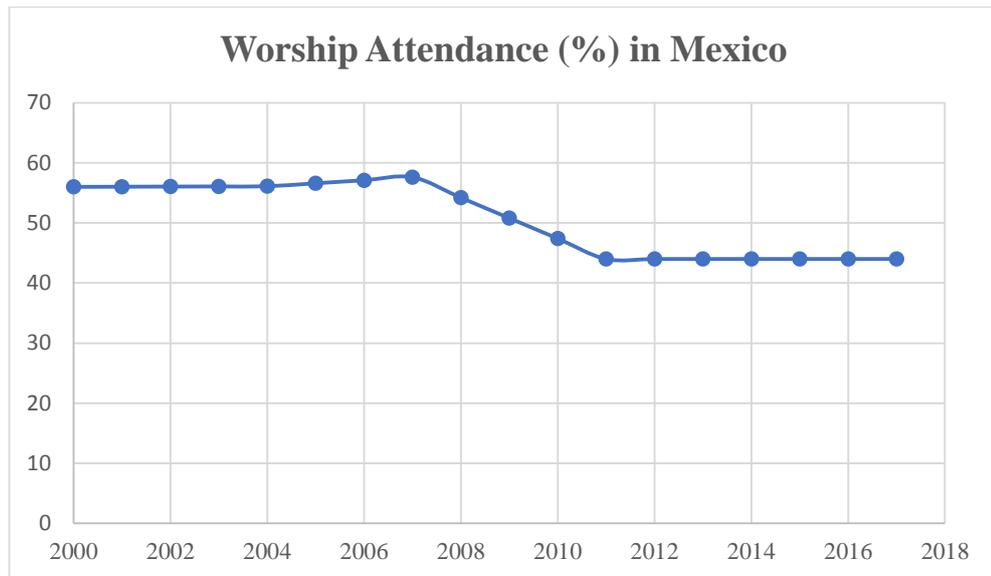


Figure 6: Worship Attendance in Mexico

Worship attendance in Mexico is illustrated in Figure 6 and it shows that at the year 2000, 56% of Roman Catholics attend church services. There is an increase of 1.6% in worship attendance from 2000 to 2007. However, the number of people attending church services began to decrease from 57.60% to 44% in 2011. The trend continued until 2017.

3.2.3 Frequency of Prayer

Frequency of prayer (FOP) measures the percentage of people that pray daily, 5 times a day for Muslims or percentage that pray outside religious service. This measurement method was chosen because it is believed that prayer leads to piety which can also cause societal development.

Figures 7 and 8 show the description for Frequency of Prayer in Indonesia and Mexico respectively.



Figure 7: Frequency of prayer in Indonesia

Figure 7 for Indonesia shows the percentage of people that pray daily or 5 times a day decreased rapidly from 90.60% in 2007. The trend continued from 2008 to 2012 reaching as low as 77% and then it increased to 84% in 2014. However, it started to decrease again from 2014 to 2017 reaching its lowest with 76.99% of the people in Indonesia praying daily or 5 times a day.

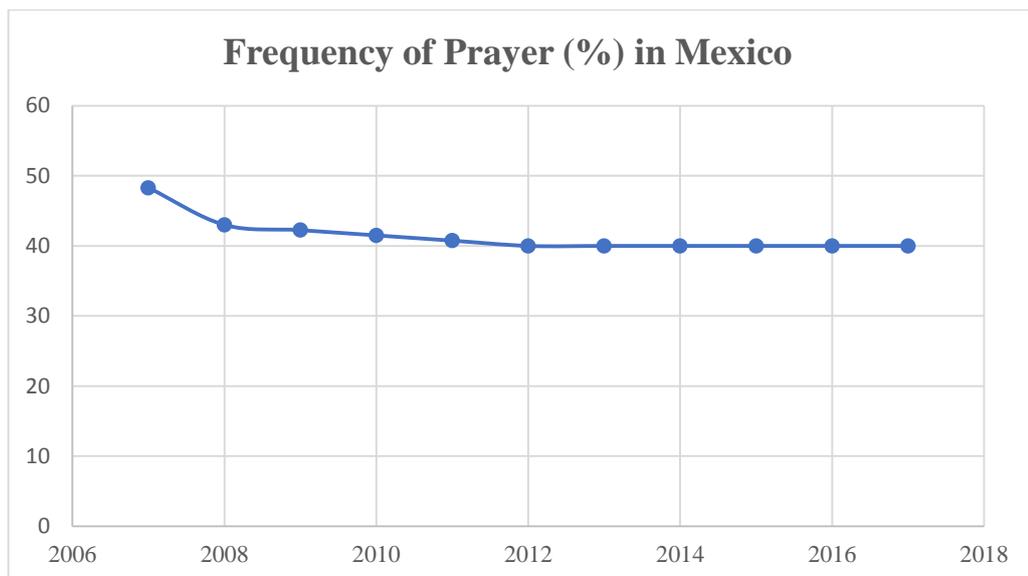


Figure 8: Frequency of prayer in Mexico

The frequency of prayer for Mexico is illustrated in figure 8 and it shows that in 2007 48.30% of Catholics pray daily outside religious services. The numbers started to decrease in 2008 which shows that 43% of Catholics pray daily. There was a decrease of 2.25% from 2008 to 2011. And by 2012 it reached 40% where the trend continues until 2017.

To model and analyze the relationship between religious practice and economic growth, we estimated the following regression equation:

$$GDP = f(IMP, WAT, FOP) \quad (1)$$

$$GDP_{t_i} = \alpha_0 + \alpha_1 IMR_{t_i} + \alpha_2 WAT_{t_i} + \alpha_3 FOP_{t_i} + \varepsilon_{t_i} \quad (2)$$

$$GDP_{t_m} = \beta_0 + \beta_1 IMR_{t_m} + \beta_2 WAT_{t_m} + \beta_3 FOP_{t_m} + \varepsilon_{t_m} \quad (3)$$

Where GDP represents GDP per capita income. The predictor variables are Importance of Religion (IMR), Worship attendance (WAT), Frequency of Prayer (FOP) and an Error term ε_t . The subscript t indexes years for each country, the first equation represents Indonesia and second represents Mexico. The above model permits the econometric inference on how religious activities of a country are associated to economic performance.

A Hypothesis can be defined as a theory or a claim with limited evidence. Therefore, researchers use the Null Hypothesis which is denoted as H_0 (H-zero) and Alternative Hypothesis which is denoted as H_1 (H-one) to test the relationship between two variables and also to get an approximate description of the phenomena being tested, the null hypothesis is what any researcher is trying to disapprove or discredit, it usually says that there is no statistical significance between variables. The alternative

hypothesis on the other hand, states that there is a significant difference between the variables being tested; basically it is the opposite of null hypothesis.

3.3 Results

To properly analyze the effects of Religion on Economic growth for both countries, we carry out a multiple linear regression analysis on SPSS, using the three measurements of religious commitment as our predictors and GDP per capita income as the dependent variable being predicted.

Table 1: Model Summary for Indonesia

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.970 ^a	.942	.917	181.575	.942	37.673	3	7	.000

The fitted model has an R square of 0.942 which implies that 94.2% of the change that happened in the dependent variable can be explained by the independent variables in the model. It also implies that the explanatory power of the model is high. The 94.2% of variation that happened in GDP per capita is explained by the regressors while the remaining 5.8% is unaccounted for in this model. Also F is high and shows the strength of the equation.

Table 2: Coefficients for Indonesia

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	39348.332	11547.378		3.408	.011	12043.122	66653.542
IMR	-277.767	66.679	-.984	-4.166	.004	-435.437	-120.097
WAT	-57.350	60.604	-.265	-.946	.376	-200.657	85.957
FOP	-71.379	21.343	-.459	-3.344	.012	-121.847	-20.911

a. Dependent Variable: GDP per capita

Table 2 above reports the multiple linear regression results for the case of Indonesia where per capita income is the dependent variable and Importance of Religion, Worship Attendance, and Frequency of prayer as independent Variables. The empirical result reveals that there is a negative relationship between religiosity and GDP per capita in Indonesia. The results show that IMR and FOP increases as GDP per capita falls and also IMR and FOP decreases as GDP per capita income increases. The correlation between IMR, FOP and GDP per capita is a strong one; as GDP per capita falls by one unit, IMR increases by 0.984 units and vice-versa. So there is almost a one-to-one relationship between the two variables. FOP is negatively changing by 0.459 units for a one unit change in GDP per capita income. Thus, the correlation can be explained that the people of Indonesia may turn to prayers and other religious practices when they encounter economic difficulties. Also people may think less of religion and prayer as they become economically stable.

Table 3: Model Summary for Mexico

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.383 ^a	.147	-.219	959.45492	.147	.401	3	7	.757

On the other hand, this fitted model for Mexico has an R square of 0.147 which implies that only 14.7% of the change that happened in the dependent variable can be explained by the independent variables. Therefore, the explanatory power of the model is low. So that means just 14.7% of the variations in GDP per capita is explained by the independent variables while the remaining 85.3% is unaccounted for in this model.

Table 4: Coefficients for Mexico

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	10584.539	7762.660		1.364	.215	-7771.234	28940.312
IMR	-29.141	56.471	-.503	-.516	.622	-162.673	104.391
WAT	34.118	364.309	.193	.094	.928	-827.337	895.572
FOP	-20.272	498.911	-.059	-.041	.969	-1200.008	1159.465

a. Dependent Variable: Per-Capita income (\$)

Table 4 shows the results on multiple linear regressions for the case of Mexico. The empirical result reveals that there's a negative insignificant relationship between the Importance of Religion, Frequency of Prayer on GDP per capita income. Therefore, the change that happened between the dependent and the independent variable is irrelevant and insignificantly correlated. This means that according to our findings religiosity does not play an important role on GDP per capita income in the Mexican economy. However, a positive but insignificant relationship also exists in the analysis between WAT and GDP per capita.

Chapter 4

CONCLUSION & SUGGESTION

Based on this research a case study of a Muslim capitalist country Indonesia and a capitalist Christian country Mexico were employed to see the effects of religiosity on GDP per capita as a measurement of economic growth. This study is trying to find out whether religiousness or religiosity of the people has a negative or positive impact on GDP per capita income. Based on past studies, results have shown that in some circumstances religion plays a positive, negative or an insignificant role in societal and economic development.

In the case of Indonesia, the more an individual believes religion is an important aspect of their lives, the more that individual will allocate time, capital and resources on praying and going to the mosque which will affect the resources being allocated to economic activity. Therefore, results have shown that the more religious the people are the less their GDP per capita in Indonesia. A survey conducted by (Guiso et al., 2003) reveals that compared to other religious followers, Muslims are the most anti-market group. This may be a factor for causing religion to have a negative effect on growth in Indonesia because the resources that are supposed to be allocated for economic activity are being used for religious services that may delay growth.

Moreover, religion can also hamper economic and societal development in Indonesia when religious institutions and individuals restrict engaging in the free market. Also

intense religious participation of religious gatherings may give rise to religious extremism and terrorism which can lead to a decrease in economic activity. Those involved in such type of indecent acts play a major role in crumbling down an economy as it is seen in many countries in the world nowadays because most extremist groups destroy infrastructure and then eventually destroy themselves. Furthermore, other negative effects of religion on economic growth can occur when there are limits on capital accumulation and interest receipts and also when there are limitations within religion on human social behavior that battle against certain needed characteristics in modern economy such as modernization and innovation.

According to R. McCleary and Barro (2003) who found out that overall development based on the Gross Domestic Product per capita income decreases religiosity. Empirical evidence suggests that with increased income, people tend to become less religious. (R. McCleary & Barro, 2003).

On the other hand, based on our findings for the case of Mexico the results reveal that there is no relationship between religiosity and GDP per capita income. Thus, this implies that there is no significant correlation between an individual's level of religiosity and GDP per-capita Income. No matter how much a person believes religion is an important aspect of their life and no matter how much time and resource are being allocated to religious activities, it will still not have a significant impact on economic growth. However, based on past studies Ortiz (2009) believes that in the long-run religion does play a role in the economic growth of capitalistic economies by changing the way material wealth is beheld as a sign of spiritual growth. Also Catholicism has shown a strong positive correlation between religion

and economic performance in all Latin American countries (Mexico included) except Uruguay where Protestantism prevails.

In the case of Indonesia, it is suggested that religious beliefs and investment making-decisions should be practiced separately because in our modern day and age certain outdated manuals in religion go against practiced needed ideologies such as globalization, free market practices and capital accumulation which in return contribute to the down fall of economic activity. Also the government should try to monitor intense religious activities that may give rise to terrorism. These measures should be taken into account in order to avoid the negative effect of religion on economic growth. Basically Indonesians should not rely too much on their faith and religious activities for societal and economic development because over-reliance on faith can cause a negative effect on growth.

As mentioned earlier in the literature review, Iyer (2010) states that in order to create a policy-making process that promotes economic activity a greater understanding of church regulations and welfare programs regarding faith is needed. The Mexican government's history of dispute between them and the Roman Catholic Church may play a part on the empirical results for Mexico because people might be afraid to show their level of religiosity due to the fact that the government interferes in religious activities by denying practicing Catholics the privileges they had in the past. Instead of focusing on the religious aspects of growth, the Mexican state government can move from intrinsic values of religious beliefs to extrinsic values of societal development, such as producing and acquiring power, transportation, machinery and medium of communication. This will surely increase the labor productivity which will lead to lower level of unemployment. However, Further

research should be conducted in order to shed more light on this issue because different religious groups in different countries with different measures of economic growth will provide diverse results.

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APPENDICES

Appendix A: Data Set (Indonesia)

YEAR	Importance of religion	Worship attendance	Frequency of prayer	GDP Per-Capita Income (\$)
2000	98.00			870
2001	97.86			834
2002	97.71			1003
2003	97.57			1187
2004	97.43	64.70		1281
2005	97.29	64.85		1404
2006	97.14	65.00		1765
2007	97.00	66.17	90.60	2064
2008	99.00	67.33	80.00	2418
2009	97.50	68.50	79.25	2465
2010	96.00	69.67	78.50	3178
2011	94.50	70.83	77.75	3689
2012	93.00	72.00	77.00	3745
2013	93.00	72.00	80.50	3684
2014	93.00	72.00	84.00	3534
2015	93.49	73.79	78.21	3369
2016	93.12	73.79	77.60	3604
2017	92.76	75.57	76.99	3876

Appendix B: Data Set (Mexico)

YEAR	Importance of religion	Worship attendance	Frequency of prayer	GDP Per-Capita income(\$)
2000	68.00	56.00		7016
2001	72.93	56.03		7410
2002	77.85	56.05		7466
2003	82.78	56.08		6965
2004	87.70	56.10		7383
2005	85.10	56.60		8189
2006	85.10	57.10		8997
2007	68.00	57.60	48.30	9589
2008	86.00	54.20	43.00	9973
2009	75.75	50.80	42.25	7975
2010	65.50	47.40	41.50	9258
2011	55.25	44.00	40.75	10205
2012	45.00	44.00	40.00	10261
2013	45.00	44.00	40.00	10764
2014	45.00	44.00	40.00	10979
2015	45.00	44.00	40.00	9666
2016	45.00	44.00	40.00	8807
2017	45.00	44.00	40.00	9304

Appendix C: Tables

Table 5: Descriptive statistics (Indonesia)

	Mean	Std. Deviation	N
GDP Per Capita	3238.73	629.042	11
Importance Of Religion	94.7609	2.22942	11
Worship Attendance	71.0591	2.90276	11
Frequency Of Prayer	80.0364	4.04345	11

Table 6: Correlations (Indonesia)

		GDP Per Capita	Importance Of Religion	Worship Attendance	Frequency Of Prayer
Pearson Correlation	GDP Per Capita	1.000	-.903	.885	-.627
	Importance Of Religion	-.903	1.000	-.887	.333
	Worship Attendance	.885	-.887	1.000	-.604
	Frequency Of Prayer	-.627	.333	-.604	1.000
Sig. (1-tailed)	GDP Per Capita	.	.000	.000	.020
	Importance Of Religion	.000	.	.000	.159
	Worship Attendance	.000	.000	.	.024
	Frequency Of Prayer	.020	.159	.024	.
N	GDP Per Capita	11	11	11	11
	Importance Of Religion	11	11	11	11
	Worship Attendance	11	11	11	11
	Frequency Of Prayer	11	11	11	11

Table 7: Variables Entered/Removed (Indonesia)

Model	Variables Entered	Variables Removed	Method
1	Frequency Of Prayer, Importance Of Religion, Worship Attendance		Enter

- a. All requested variables entered.
- b. Dependent Variable: GDP Per Capita

Table 8: Anova (Indonesia)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3726156.384	3	1242052.128	37.673	.000 ^a
	Residual	230785.797	7	32969.400		
	Total	3956942.182	10			

a. Predictors: (Constant), Frequency Of Prayer, Importance Of Religion, Worship Attendance

b. Dependent Variable: GDP Per Capita

Table 9: Descriptive Statistics (Mexico)

	Mean	Std. Deviation	N
Per-Capita income (\$)	9707.3636	868.92730	11
IMR	56.4091	14.99678	11
WAT	47.0909	4.91639	11
FOP	41.4364	2.51138	11

Table 10: Correlations (Mexico)

		Per-Capita income (\$)	IMR	WAT	FOP
Pearson Correlation	Per-Capita income (\$)	1.000	-.378	-.286	-.201
	IMR	-.378	1.000	.843	.641
	WAT	-.286	.843	1.000	.932
	FOP	-.201	.641	.932	1.000
Sig. (1-tailed)	Per-Capita income (\$)	.	.126	.197	.277
	IMR	.126	.	.001	.017
	WAT	.197	.001	.	.000
	FOP	.277	.017	.000	.
N	Per-Capita income (\$)	11	11	11	11
	IMR	11	11	11	11
	WAT	11	11	11	11
	FOP	11	11	11	11

Table 11: Variables Entered/Removed (Mexico)

Model	Variables Entered	Variables Removed	Method
1	FOP, IMR, WAT ^a		Enter

- a. All requested variables entered.
- b. Dependent Variable: Per-Capita income (\$)

Table 12: Anova (Mexico)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1106470.345	3	368823.448	.401	.757 ^a
	Residual	6443876.200	7	920553.743		
	Total	7550346.545	10			

a. Predictors: (Constant), FOP, IMR, WAT

b. Dependent Variable: Per-Capita income (\$)