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God's Bazaar: Whether Belief in the Divine Effects Human Economic Development

天府之市：神聖信條如何影響人類經濟發展

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Abstract

This paper is a large N regression analysis that studies the effects of government support of religion on economic modernization. It analyzes 171 countries using 6 different measures of government support of religion taken from the Religion and State Dataset. The study finds that there are few statistically significant results that government support of religion affects economic modernization. These results are discussed in detail along with enumerating other potentially important studies that should be conducted in order to better understand the potential economic consequences of government entanglement with religion.

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Introduction

Supernatural beliefs have been a staple of humanity for all of recorded history. It has been expressed in countless wars, debates, treatises and philosophies throughout the history of virtually every society to ever exist. However, despite the obvious pull that the belief in various supernatural entities have on the human psyche it is only recently that scholars have actually begun to study how religion relates to human affairs. The majority of this work relates to how religion affects violence, war, or terrorism. Works such as *Getting Religion?* By Monica Toft and *Bringing Religion into International Relations* by Jonathan Fox and Shmuel Sandler have made great strides in explaining how religion affects internal military conflicts and Terrorism (Toft 2007, 97-130, Fox and Sandler 2004, 137-163).

The study of how religion relates to other aspects of human affairs has sadly been neglected by the majority of social science scholars. Research linking religion to economic activity has been scarce and is focused primarily on the study of how religion uses its restrictions to perpetuate itself rather than increase the wealth of its members. This leads to four main conceptions of religion: 1) Religion as a self-perpetuating force trying to create systems that create psychological and economic pressure to maintain themselves 2) Religion as an ideology restricting force that uses its esoteric rules and laws to restrict research and the actions of its members 3) Religion as a backlash against modernization and 4) Religion as a societal disruption. All of these conceptions will be covered in greater detail during the literature review section of this paper.

Competing viewpoints are also prevalent throughout the study of religion. Many scholars argue that far from being a hindrance to economic development, religion is in fact a boon;

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creating more economic opportunity for its adherents than would otherwise be available to them. Arguments regarding the value of religion for economic development fall into two main categories 1) Religion as a moral codification 2) Religion as a promotion of industry. Both of these countervailing perspectives will be evaluated further in the literature review section of this paper.

This project is not designed to confirm which of these hypothesis is correct or incorrect, but instead focuses on the direct statistical evidence for the religious restriction hypothesis. I contend that religious restrictions on economic, social, and technological actions will restrict the development of the economies of the societies in which there is a greater degree of government support for faith based institutions. I will show this by comparing the World Bank measures of economic development to the religiosity measures determined through data gathered from the ARDA project in order to find a potential link between these two indicators.

Why Study Religion?

As much as one may or may not approve of religious faith, the majority of people on planet earth are, in fact, religious. Many of those individuals claim religion plays a significant role in their daily lives. They turn to priests for everything from relationship issues to economic advice and it is well documented that religion changes people's behavior. It is positively linked to terrorism, civil war, education levels and a host of other economic factors that will be discussed below. Knowing the powerful influence that religion exerts on so many people and understanding how it impacts the major fields of social science is paramount.

Not only that, but religion is eminently and immediately in the public eye and has remained there for some time. From the legendary debates of the late Arch-Atheist Christopher

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Hitchens attacking religion as a universal poison (Hitchens 2007) to the rise of terror as a major political concern for people of the US and Europe in the wake of the September 11th attacks and subsequent wars; people seem to be interested in how religion is affecting their lives. Arguments over how religion should be treated in the wake of violence and how much deference it is to be given in the secular societies of the west have become a major part of political discussion. What the pundits and politicians lack at the moment, however, is data. Knowing how religion affects violence, economics, trade, education and politics would give leaders and analysts an opportunity to come to correct conclusions, while a lack of data could lead to overcorrection of one form or another while trying to adjust policy and social norms to the challenges of integrating religion and secular society.

In short, religion is one of the single greatest and longest enduring constructs of humanity and it does not appear, despite how much atheists around the world may wish it, to be going away. Knowing that it is, and will remain for the foreseeable future, an influence on a large majority of the planet, then it is conceivable that religion could influence many diverse elements of human behavior including economics, war, sex, law, education and a host of other potential elements of human interaction. Knowing this, it would be irresponsible of social scientists not to unravel this massive entangled web and see if it proffers benefits to mankind, detriments to human development or has little effect on economic development at all.

This project will begin this process of examining how religion affects society by researching how it behaves in regards to modernization efforts around the world. Knowing how religion is affecting such efforts will inform not only scholarly inquiry into human behavior, but also the development policies of governments and NGO's that are attempting to help underdeveloped countries build their economies and institutions. Is religion a hindrance to such

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efforts? A help? Some combination of both? Or perhaps has no effect at all. Thomas Sowell once (Sowell 2016) argued that: “There’s no explanation needed for poverty. The species began in poverty. So what you really need to know is what are the things that enable some countries, and some groups within countries, to be prosperous.” His point was that some cultures and countries do better than others and that it is important to study their success. However, as I will address in chapter one, religion remains an underexplored concept in the current economic models of modernization and development. The ubiquity of religion in human affairs indicates that it is possible, even likely, that people’s beliefs, which affect so much of their behavior, will have an effect on their attempts to interact with each other via the medium of commerce. This study is an attempt to contribute to understanding how this phenomenon impacts our economics and offer the data necessary to build a blueprint for how governments should treat religion in the context of development.

1.1 Literature Review

1.2 Theories of Economic Development

In order to examine the effects of religion on economic development it is important that we first have a clear idea of what economic development is. There is a robust scholarly debate regarding the nature and the mechanisms by which countries develop and grow their economies and detriments to that economic development. In this section I will examine the four most prominent theories with respect to economic development: Modernization, Dependency, Globalization, and World Systems theory.

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1.2.1 Modernization Theory

Modernization theory springs from the economic aftermath of World War II, the rise of the United States as a superpower, and the implementation of the ambitious Marshall Plan in order to rebuild Europe quickly after the war. This created stronger and more productive modern societies than those that had existed previously. Modernization theory argues that modern society has a clear definition of roles that allow it to be more effective than it had been previously. Modern societies clearly articulate the differences between public and private institutions and roles which increases their functional capacity. One can think of these structures as individual specialists, with fewer all-encompassing or monolithic structures.

Modernists argue that these structures are developed by a process of phasing them into existence through the series of stages described below:

1) **Traditional Society:** In this stage the country has not yet developed into a modern economy and channels economic activity into agriculture, military, and religious pursuits. While this stage is primarily associated with undeveloped societies, it is also associated with a degree of economic fatalism or loyalty to tradition that prevents people from creating new economic wealth or re-examining and re-evaluating the current models of generating wealth. Often wealth, fortune, and other indicators of success are associated with divine favor and placed outside the realms of human ingenuity or control. For example, a farmer that has a good harvest thanks the god of the fields for his success rather than attribute it to his own action or ingenuity. Technology exists, but remains extremely limited and specialized. An agricultural community may have irrigation for example, but they would not use that same technology to run a windmill or generate

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electricity. Economic activity is still based largely, if not completely, on the barter system (Rostow 1960, 17-36).

2) **Economic Growth:** This stage is a precondition for quick economic development. At this stage of development society begins cultivating the necessary attributes for economic expansion. More resources begin to be invested in the cultivation of raw materials such as mining operations or food production. Additionally, greater emphasis is placed on manufacturing and good production activities than in the previous, largely agrarian based traditional societies (Rostow 1960, 36-59).

3) **Takeoff:** The takeoff stage of development is characterized by quick economic growth and dynamic changes in the political, technological, or economic technologies utilized by society. During this period, the old blocks to innovation and economic blocks to productivity (such as traditional farming) are removed and society becomes driven not by past tradition, but from economic necessity and efficiency. Economic growth and change becomes normalized and there is a greater emphasis on newer sectors of the economy such as factory production, financial investment, and entrepreneurship and a de-emphasis on agriculture (Rostow 1960, 36-59).

4) **Drive to Maturity:** This stage of development is concerned with extending the scope of modern technology across all sectors of the economy. Modern technology is applied to as many generators of resources as possible and the country begins to engage in and develop international trade and economic activity. This is an expansion of the previous takeoff stage with further refinement of technological application and an expansion of economic activity away from the narrow industrial and agricultural centers (Rostow 1960, 59-73).

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5) **High Mass Consumption:** In this stage sectors of the economy shift focus to the production of consumer goods that can be purchased on a large scale. Few, if any, members of society need be engaged in subsistence level economic activity. This stage is concerned with high output levels of durable consumer goods and increasing employment and wealth in order that those goods have a market. Society begins to place a greater emphasis on the development of luxury goods and items rather than a simple focus on military or economic development (Rostow 1960, 73-106).

Modernization theory assumes that each of these stages is necessary for ultimate economic success and that attempting to jump from one of the lower order stages directly to the stage of high mass consumption can have disastrous consequences. Attempting to modernize the economy too quickly can leave other important institutions, such as government regulators, unable to cope with the new scope of economic activity. Assuring that each institution necessary to development is capable of handling its responsibilities in the new economy will insure a solid foundation for the jump to the next stage. Otherwise, one might be concerned about starvation when the food supply runs out, or corruption when the new, extremely wealthy class begins to buy government officials to protect their interests. Problems such as this will hinder further economic development and ultimately slow the process of economic modernization.

Criticism of Modernization Theory

Critics of modernization theory contend that the theory is too static and ignores important aspects of economic development, such as cultural understanding or religious heritage that might change the trajectory of development. Furthermore, modernization theory seems to argue that the stages are static and that economic development can only be measured in the terms outlined in each of the stages. Critics argue that since it was developed in the west, modernization theory

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promotes the western values that it deems necessary for economic development and as a result promotes a kind of cultural and economic uniformity, dismissing other cultural constructs that might serve to help economic development as well as or better than the values inherent in western capitalism (Tipps 1973, 206). Additionally, the traditions that may push forward or hold back economic development are not uniform across the developing world. Modernization simply lumps all countries that have not achieved what might be referred to as their peak economic development, together as ‘traditional’ societies and ignores the very important differences of culture that might induce or retard modernization (Tipps 1973, 206-207).

Modernization also fails to account for the impact of external shocks that can have a significant effect on economic development. Civil wars, market collapse, colonial domination, invasion and a host of other factors may impact economic development and may move a country’s economic status between the various stages. Critics argue that a theory that fails to take into account all of these factors will find it impossible to understand internal power and resource struggles as well as the behavior of external powers towards developing economies, and will certainly fail to predict or properly analyze such occurrences (Tipps 1973, 212-213).

Finally, critics point out that modernization views ‘traditional’ societies and ‘modern’ societies as mutually exclusive, and thus fails to account for societies that manage to develop their economies while maintaining their traditional institutions. This assumption of incompatibility creates an “analytic gap” that denies that ingenuity or adaptation might be able to overcome the cultural barriers to achieving modernization. Critics also argue that the stages set out by modernization theory are somewhat arbitrary and real world development does not fit into the tidy packages it outlines (Tipps 1973, 213-214). A country might quickly develop its manufacturing sector, for example, but may not be quick to change its governing institutions or

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structure. Thus, a country could be considered to be in multiple “stages” of development simultaneously which would seem to make the stages fairly useless as a tool for describing the process of modernization.

1.2.2 Dependence Theory

Dependency theory attempts to explain economic development through the lens of external influences and investment. This theory divides the world into two camps. Dominant states which are the states that have the resources, institutional structures, and advanced industrialization are often associated with the member states of the Organization of Economic Co-operation and Development (OECD). Dependent states, are states that lack the industrialization, natural resources, or institutions that would allow them to be economic powerhouses. These states are considered to be dependent on foreign investment in order to build a functioning economy and they cannot easily escape this dependency because their economic systems are too bound to existing financial structures that are largely controlled by the dominant states (T. Smith 1979, 249). Their economic weakness keeps dependent states tied to an inherently inequitable system.

In this dynamic, interactions between the dependent and dominant states are inherently unbalanced and it is in the economic interest of the wealthier states to maximally exploit the less developed ones for their own economic gain. Since larger, better developed economies are less easy to exploit it is to the advantage of dominant states to make sure that economic growth and development happens as slowly as possible so that they can continue to reap this economic advantage (T. Smith 1979, 250-251). Thus dominant capitalist states use these underdeveloped economies as a place to acquire cheap labor or continue to use outdated or more dangerous technologies or practices because the economic circumstances do not allow for the strict

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regulation and more robust competition that often arises in the larger, better developed economies of the dominant state (T. Smith 1979, 250-251).

Dependency theory also carries a historical aspect as well. Many of the states that dependency theorists might consider to be dependent states are previous colonies of larger powers that had much of their wealth stripped from them through generations of colonial exploitation. Countries that fall into this category are not "behind" their more developed counterparts, but rather are victims of economic exploitation that was outside their control, with patterns of behavior and activity imposed on them by colonial masters in an attempt to keep them in a subservient role (Tipps 1973, 250).

A subset of dependency theory is world systems theory. World systems theory (WST) is extremely similar to dependency theory. Unlike strict dependency theory, however, world systems theory does not have static and unchangeable categories. World systems theory allows for the movement and development of countries into any of its strata.

World systems theory breaks the world economic system into three key strata of economic relationships: core, semi-periphery, and periphery. Like classic dependency theory these different strata are economically interrelated, but the relationships are unequal and the larger, better developed countries take advantage of the smaller, less developed ones for economic gain. However, unlike classic dependency theory, WST does not end at exploitation. WST argues that each stratum provides a different set of benefits. The core economies provide specialized high-profit consumer goods while the periphery economies provide raw materials and cheap labor to the core and semi-periphery countries. The semi-periphery economies provide a measure of both types of goods, with high-profit goods being provided to periphery nations that

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are incapable of producing such goods for themselves, and raw materials and labor being provided to the developed core nations (Wallerstein 1974).

World systems theory, unlike conventional dependency theory, does allow for the possibility that these categories are not static. While acknowledging that changing one's economic strata is difficult, it is possible. The degree of difficulty is greater when moving from the semi-periphery to the core than from periphery to semi-periphery. WST assumes that these relationships will remain relatively static with core nations having the economic leverage over the others and ultimately accumulating the lion's share of the wealth from aggregated economic transactions (Wallerstien 2013, 4).

Criticism of Dependency Theory

Dependency theory asserts that there is a clear national economic interest, that this interest can be calculated and, if found to be inhibited by external factors outside the nation's control can then be placed in the category of "dependent" country. However, this national interest is calculated through a consideration of the poorest or most exploited elements of society. Dependency theorists assert that without addressing these imbalances ultimate economic success will be difficult, if not impossible, to achieve. However, a generalized guideline for how this economic interest should be defined has yet to be universally used by dependency theorists (Friedmann and Wayne 1977, 407-410).

Additionally, dependency theory appears to be focused primarily on relationships between two single nations, one that would be categorized as a "dependent" nation and one that would be categorized as the dominant state. Critics point out that while these relationships may indeed be accurately described by these categories, modern economies are usually not dependent on a single trading partner and the dynamics of those relationships can change depending on the

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relative size of the countries involved and their history and cultural relationships with one another. Since virtually all countries on earth are connected to each other through overlapping economic relationships, the result is a confusing web in which it is difficult to place nations into permeant categories and even then, they may not be accurate representations once one examines a different relationship (Friedmann and Wayne 1977, 402-406).

Finally, dependency theory assumes a static political system in which the legacies of the exploited and the exploiters are based on history and the dynamics of those relationships do not change, or at least not significantly enough to change the categorical dynamics of the countries involved. So, despite India being a much larger economy, with a greater workforce and a fast growing technology sector, it might still be considered in a "dependent" relationship with Great Britain. This static conception does not seem to fit with the changing relative size and dynamism in the economics of the modern global economy. This conflicts directly with modernization in which countries can develop and improve their economies through a series of predictable steps. Dependency theory asserts that relative positions will remain static because it advantages the dominant states to have dependent states. The assumption then is that minimal economic ties to core states will create better economic outcomes. Critics argue that this assumption is not born out as most states that are well tied into the global economic system do better, on average than those that are isolated from it and the increased integration from globalization is an economic boon, rather than a hindrance to those countries that participate in it (Dollar and Kraay 2004; Edwards 1998).

Many of the criticisms of world systems theory are shared with those of dependency theory since the two have a very similar structure. While WST ranks world economies in three categories and not two, it still has a ranking system that does not take into account the shifting

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dynamics of inter-state commerce between nations outside its economic strata (Robinson 2011, 739). Since WST often ignores or undervalues the state as the unit of action these factors can be overlooked in that analysis. Countries of the semi-periphery trade amongst themselves, for example, and this muddies up the power imbalance that is at play. Certainly Mexico, a country in the semi-periphery and China, also in the semi-periphery, are hardly interacting on equal economic footing.

World system theory also contends that countries are interacting in a capitalist market and that it is this economic model that determines the levels and degree of exploitation. However, many countries do not operate on a pure market model and some of them, such as China, have massive economic impact. Where countries operate on a non-capitalist model of economic advancement, however, then all of the capitalist centered reason for exploitation will have areas of the world economy in which they do not apply. In order to get around this problem, capitalism in WST has become so nebulous a term and encompasses so much that the term loses meaning. Critics of WST argue that this redefinition saps the value from the theory due to its nebulous and ill-defined nature (Pieterse 1988, 257).

Finally, critics of WST argue that it ignores any changes or shifts in the political landscapes below a systems level analysis. A change in government structure, shift in economic goals, a war, or an economic or geographic rivalry between states is often not enough to change the systems level analysis and the placement of a country within the strata established by WST. Critics argue that while these changes hardly register in WST, they absolutely have a large effect on the world community, cultural and political relationships, and even economic productivity which can easily affect a country's economic or political path, and its relationships with countries in all the different strata. Because WST is intent on only macro level analysis, it misses

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much of the important details that can change the ultimate outcome of analysis. This lack of acknowledgment of micro-level political analysis, argue the critics, means that WST will ultimately build a too static, and slow changing socio-political model of reality that is not necessarily reflective of actual economic or political relationships (Robinson 2011, 740).

1.2.3 Globalization Theory

Globalization theory marks the changes in economic, culture, political development and regulatory changes that are the result of the world converging into near universally accepted trade and market practices. Like dependency theory, globalization theory also analyzes which states are dependent on what institutions and trade for their economic success. However, unlike its counterpart, globalization theory does not necessarily assign blame or determine where lies economic exploitation. Instead, globalization theorists argue that the economy of every country, rich and poor alike, is becoming less and less dependent on its domestic institutions and instead more dependent on international trade, business, technology, and cultural similarity. This provides not only a quantitative difference in the amount of new wealth to be developed, but also qualitative difference in the cultural and social interactions between different states and peoples (Edwards 1998).

While globalization scholars acknowledge that a wealth iniquity among those states that are participating in the process of global economic development exists, they also argue that although gains in wealth are not uniform, globalization has created wealth in both poor and rich countries. Their argument is that the implementation of capitalist values and systems on a global scale has created unprecedented wealth and that despite unequal gains, everyone is better off with global economic participation. Technology, while often developed in the more economically advanced capitalist nations, matriculates throughout the world over time and does

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not create permanent iniquities. Instead, while not evenly distributed, the implementation of new systems and economic advantages in the long term creates wealth for everybody. It allows countries with comparative advantages for producing certain goods or services to do so on a global scale and thus creates a much more efficient, and ultimately beneficial system of economic development (Levy 2007, 142).

Globalization also asserts that over time economic activity will also become less dependent on government policy and less subject to the control of individual states because products and services will increasingly be bought and sold in a global market that will not be subject to the limitations of laws that are effective only within national borders. Although economic elites will hold increasing power over society at large, who becomes elite and what policies they support will be largely determined by cultural and social factors (Reyes 2001, 11). Thus, the nation state ceases to be a unit of analysis and the cultural constraints and advantages for economic activity are more closely scrutinized.

Criticism of Globalization Theory

Globalization theory has its critics as well. Many scholars think it pays insufficient attention to the iniquities inherent in spreading capitalism around the globe and points to the idea that while more overall wealth may be generated by implementing a global capitalist system, much, if not most, of the wealth is concentrated at the very top of the economic strata (Piatti and Togler 2013).

A forceful critique of this system of economic development is that it is not as efficient as it portends. This argument, developed by Joseph Stiglitz (Stiglitz 1992), contends that capitalist systems are brought low because in order for everybody to behave in a way that strategic rationality demands (a requirement for a market to function) little inefficiencies or

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misunderstandings of information can lead to massive market failures and huge shocks even in countries with well-developed capitalist institutions. In countries where such institutions do not exist, it is argued, it is very difficult for a capitalist modeled country to function as was intended. Stigliz argues that in order for globalized free trade to function effectively an overarching regulator authority must be enacted or these inherent flaws in capitalist institutions will cause major economic difficulties (Hellmann, Murdock and Stiglitz 2000, 162). Capitalist institutions must also operate more openly and with greater oversight so as to reduce the amount of misinformation available to market operators within a globalized system which creates long term stability in the economic system (Stiglitz 2010).

Detractors of globalization theory also argue that while general financial trends in a global capitalist system may be rising, capitalist economies seem to develop in cycles of destruction and rejuvenation that can leave many people devastated. This cyclical "boom and bust" model may allow large institutions and market investors to recover fairly quickly but often can leave large numbers of workers, many of whom do not have the capital to be significantly invested in the market, much poorer than they were before they became participants in this economic model. Without sufficient capital to easily rebuild their wealth and resources, they can experience significant hardship. Government interference is often required to undercut the loss of jobs and wealth at the bottom levels of the economic strata, calling into question whether the continued liberalization and expansion of global capitalist ties is a good thing (Kalleberg and Von Wacther 2018, 9-13).

1.2.5 Gods Bazaar

One thing that all these models of economic development have in common is that they use a macro level analysis to explain modernization. The unit of analysis gets larger and larger

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moving from a state to a group of states to a global system of interlocking interdependent states and yet none of them consider the behavior of the people that comprise those states in any significant way. Instead, the focus is placed on means of production, exploitation, resources and assumes that people will act in a way that will maximize whatever utility that they have. This ignores a vital element of modernization and economics that needs to be explored, namely, that economies are made up of people.

People are the ones making decisions about how to spend money and how to allocate resources. They make choices about who to interact with, who to trade with, and who to avoid. People develop beliefs about the world, about the motivations of others, and about investments. Those beliefs are not always rational. Religion is a perfect illustration of this, capable of fractioning groups of people into rival theocratic beliefs or uniting disparate people into a unified community of faith. Since most of the world's population has some kind of religious belief system and since religion can be such a powerful motivator as to convince people to go to war, commit suicide, pass laws, run for high office and many other things besides, it is the height of folly to assume that it will have no impact on the economic calculations people make and indeed, that states make, when attempting to create and implement economic policy. People buy and sell indulgences and favors from god all the time, they donate to churches and preserve holy sites. Religion has its own schools and its own books. God has a thriving bazaar, and it needs to be better understood.

1.3 Theories of Religious Detriment to Economic Development

1.3.1 The Case of Islamic Economics

Perhaps the greatest examples of how religion affects economic policy can be found through the study of Islamic Economics. This is an economic system designed to conform to Qur'anic law and custom while at the same time theoretically enriching its populace. It is

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designed as an alternative to "western" capitalism which is castigated in most of its founding texts as a major, if not the largest, source of inefficiency, injustice, and moral failures (Kuran 1993, 304). The economic activities are based on the economic models that existed in the Muslim world in the seventh century during the Muslim "golden age" and are intended to conform with Sharia law in order to avoid violating Muslim religious restrictions. However, the economic benefits of this system didn't materialize, nor did many non-religious economists expect them to. The goals of Islamic economics appear to not have achieved their development goals and Muslim countries as a whole remain underdeveloped when compared to their western counterparts (Ebrahim, Makhdoomi and Sheikh 2012, 34-36)

Unlike the liberal economic models of the west, which argue that growth and economic prosperity are the basis for implementing economic reforms, Islamic economics are designed to encourage economic participation and keep Muslims in the faith through absolving religious guilt for Muslims that benefit from the economic practices that the faith denounces (Kuran 1996). Muslims that benefit from this "moral" banking system are more likely to donate money to the mosques, support religious movements and undertake public acts of religious piety (Kuran 1996, 438). Additionally, religious leaders hope that by implementing "Islamic Economics" widely enough, they can create a Muslim common market that will further isolate the Muslim world from the economic and political ideas of the west, making it easier to perpetuate the faith. Thus, religion has a vested interest in limiting development in the Muslim world.

Moreover, Islamic banking has been charged with being unable to conform to its own economic and political rules and has been accused of "legalism," a form of sophistry that focuses on building Islamic credentials rather than actually conforming to Islamic moral principle as defined by Tawhidic law (Hasan 2016, 454-455). This position ultimately holds that the Islamic

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banks that have been the most successful have been the ones that adopt pseudo western banking practices, and abandon or severely restrict the influence of Islamic law (Khan 2010; Sukmana and Ibrahim 2017). Islamic banking also has distinct weaknesses, because it is a fledgling system. It has not developed the infrastructure required to keep an active and useful safety net in place. It also lacks a robust regulatory system and regulators are often disinclined, or unable to, ensure Sharia compliance. Sharia is also highly restrictive of monetary practices and few modern financial tools currently comply with its demands (Kammer, et al. 2015). These challenges indicate that Islamic Banking, should it become viable as a commercial banking system, is reinventing the wheel to comply with religious dogma. This delay in making banking a dogmatically acceptable practice will cause delays in expanding access to financial capital in the communities it serves.

A Defense of Islamic Banking

Islamic banking has its defenders. Scholars that defend the institution point to a similar connection between religious morality and economic practice as indicated above. They argue that the Islamic banking institutions are less prone to over leveraging themselves prior to crises and that they are more likely to continue lending and less likely to have non-preforming or underperforming loans leading to higher overall asset quality (Beck, Demirgüç-Kunt and Merrouche 2013, 444). Additionally, due to the restrictions against charging interest, Islamic banks are more likely to do smaller scale lending to individuals and will be less concerned about collateral to cover the resulting interest on the loans. Thus, ultimately more money enters into the community and allows for greater spending (Imam and Kpodar 2016, 389). Another argument is that Islamic banking is inherently restricted by its religious ideology. Islamic banking is, for example, prohibited from funding “socially harmful projects” such as casinos (Imam and Kpodar

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2016, 390-391). This greater social consciousness, it is argued reduces the negative externalities of financial projects. Finally, this kind of banking makes itself available to pious Muslims that may otherwise avoid taking advantage of banking institutions that they believe are incompatible with their moral code of conduct. Thus, by expanding access to banking services Islamic banking stimulates the economies in which it operates.

Additionally, proponents of Islamic finance argue that it promotes risk sharing as part of its Sharia rules which reduces the instability inherent in the conventional banking sector. Shared risk also means Islamic banks are less likely to experience major economic shocks (Obiyathulla, Mirakhor and Askari 2018, 192). However, while these factors may be encouraged by Islamic law, there is little evidence they have been implemented on a large scale, making the potential benefits of risk sharing largely hypothetical as of the time of this writing (Obiyathulla, Mirakhor and Askari 2018, 210).

1.3.2 Religion as Ideology Restriction

Religious institutions are highly insular, but religious assertion, especially in fields dealing with historical analysis, such as Paleontology or Evolutionary Biology, does not conform to the reality described by science. Thus religion seeks to control the ideas that their members, especially younger members and children, are exposed to in order to maintain the fiction that the church is infallible. This is most easily studied in western societies through the interaction between Christianity and the existent educational systems. This is perhaps best illustrated using the Christian South in the United States as an example.

Fundamentalist Christians in the United States have fought for decades to oust evolution from the public school system. School Board members in Texas have routinely instituted the “teach the controversy” doctrine which allows them to do an end run around legal precedents

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that preclude creationism from being taught as a scientific fact. This makes little sense from the perspective of giving students a scientific education and indeed can only be explained from the perspective of attempting to teach a doctrine that conforms to religious dogma rather than scientific reality. Additionally, the closer a religious person is to a fundamentalist interpretation of scripture, the more likely they become to support the teaching of creationist doctrine in public education (Deckman 2002). Religious beliefs are also negatively correlated to reasoning and analytic ability. In two separate analyses, analytic and cognitive style of religiously minded individuals was negatively correlated to reasoning ability (Pennycook, et al. 2012). The participants in that study were given a test to determine their cognitive ability and reasoning style using quasi mathematical problems. Those people willing to engage in more laborious thinking rather than making quicker intuitive judgements were significantly less likely to be religious. Additionally, religiosity, when correlated with more conventional measures on intellectual activity, such as levels of education, was universally negative. (Pennycook, et al. 2012) While this correlation does not prove causation, it does indicate that the type of reasoning religious people engage in is less likely to form accurate models of reality than their more skeptical peers.

This attitude of using education as a tool for religious indoctrination seems to have an adverse effect on the economies of southern states. The more religious southern states experience lower wealth mobility and higher levels of inequity which appear to correlate with their greater levels of religiosity and their generally more conservative and restrictive attitudes towards religion (Park 2013). Additionally, states that are liberal, and by extension less religious, are likely to have more stable financial flows and are have less economic risk than their conservative counterparts. In fact, the two economies are more diverse than economic models found in separate nations (Popper and Parsley 2018).

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This attempt to limit student access to education that contradicts doctrine makes little sense if the aim is to introduce students to scientific best practices, but makes great sense when approached from the perspective that students that are familiar with current scientific understandings are in danger of breaking with a religious dogma that does not conform to reality. It also appears to show no economic benefit to the region, and indeed may inhibit southern modernization and efforts to address income mobility and inequity (Lehrer 2004, 16). Religious institutions also have reason to believe that academic institutions are a threat to religious dogma. Higher levels of academic study have been correlated with a decrease in religiosity and students of higher learning are more likely to be less religious than their less educated peers (Smith, Gecewicz and Schiller 2017). Assuming religion wishes to perpetuate its ideology then it makes sense that it would deter its adherents from higher education. This could have adverse effects on their economic health as higher education is an essential feature of developed economies and lack of access to it will severely inhibit economic wellbeing due to an inability to build technological and industrial capabilities (Krauss, et al. 2015).

An examination of the historical relationship between religious and secular educational institutions reveals significant hostility from religion due to its lack of standing as an academic subject in the secular academic centers of higher learning. The resulting hostility towards academic communities due to fears that academic learning and the promotion of "secularism" would erode the religious establishment created a schism that has divided the academic community since the enlightenment (Chiswick 2003).

Critique of Ideology Restriction

Some scholars have argued that religion, far from being a hindrance to education and a restriction on learning actually gives more students access to education. Brown and Taylor in a

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study done in 2007 found that there was a positive relationship between church attendance and an individual's level of education (Brown and Taylor 2007). A 2013 study found that there is a negative relationship between school spending and church attendance, indicating that people that do not have a religious affiliation might be less inclined to fund public goods than their secular counterparts (Franck and Iannccone 2013). In 2006 Barro and Mcleary also found that religiosity and education is positively associated and that the religious may be more inclined rather than less to achieve good educational outcomes (Barro and McLeary, Religion and Political Economy in an International Panel 2006). If these positive correlations between education outcomes and religious are accurate, then it would be easy to argue that rather than restricting the amount of access students get to knowledge, religion instead facilitates improving access to the ideas and knowledge required for a secular education.

1.3.3 Religion as Societal Disruption

This perspective looks at religion not as a linear disruption of economic policy but rather as a destabilization of societal coherence through the perpetuation of civil war and violence. The argument is as follows: Religion is correlated to higher levels of civil war and political violence, higher death tools, and overall longer civil wars, once started, than its secular counterparts. Additionally, religious civil wars have a higher likelihood of reoccurrence than their secular counterparts (Toft 2011, 142).

This increase in duration and levels of violence is caused by a variety of factors unique to religious combatants. Religion leads to uncompromising or near impossible demands that cannot be accepted by opposing parties a problem exacerbated by having a religious conflict in which faith fights on both sides of the conflict. Additionally, the conflict is extended when the nature of the conflict is placed in a religious context, For example, when the context is, "God wants you to

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go kill those people over there," then negotiation towards a peaceful solution can be seen as a capitulation or betrayal of god's will. Religious extremists fighting and dying for a holy cause seem to be disinclined to commit such a betrayal (Toft 2011, 142-143). Wars of this nature create negative economic effects on the countries in which they are fought (Kang 2005). It is difficult to develop modern infrastructure and build a market economy or even establish rules of trade or bartering in a war zone where one might lose invested assets to members of one of the warring groups, or be killed at some point during the fighting.

In this sense, religion as an extender and a multiplier of the intensity of such conflicts, by logical extension, increases the economic damage done by such conflicts. Religious polarization has been shown to be a major cause of the "Africa Growth Tragedy" albeit indirectly, by encouraging conflict and by extension discouraging economic and political investment (Montalvo and Reynal-Querol 2000, 14). Thus religion, by creating an unstable and ultimately violent political environment, discourages economic growth by encouraging the negative externalities caused by civil war.

Critique of Societal Disruption

Some scholars argue that this assumption of societal backlash has yet to be sufficiently proven and that other factors may be masking themselves as religion and throwing off the analysis. Jose Montalvo and Marta Reynal-Querol argue that it is not religion that causes societal disruption in this manner but rather the identity fragmentation resulting from competing religious claims that causes internal friction. In their model, societies are only in danger of being disrupted by religiously inspired conflict if they fall into a very specific category of religious polarization (Montalvo and Reynal-Querol 2002).

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They show that when religion is at high levels of homogeneity then there is very little chance of a religious conflict escalating into a civil war. Additionally, when a country has high levels of religious diversity in which no religion has a high probability of domination, religious conflicts are equally unlikely since none of the potential combatants are likely to see the others as a threat for total dominance of society or to be in a position in which to proclaim religious law that may be antithetical to their own doctrines (Montalvo and Reynal-Querol 2002, 24). Conflict arises most often when religious power is split between two near equally powerful religious groups that compete for governmental control. Since either side can view the other as a threat and since they have the resources to cause significant problems for each other, conflicts between groups can escalate into larger scale wars. Thus, in this model it is religious fragmentation and ideological polarization that increases the chance of conflict, not simple religiosity or religious polarization (Montalvo and Reynal-Querol 2002, 24-31).

1.3.4 Religion as a Modernization Backlash

Religious fundamentalism as a backlash against modern values is the final conception of religion as a hindrance to modernization. Modern values in this case are defined as anything that conflicts with narrow or traditional religious understanding within a community. Additionally, modern values might mean the elevation of newer, secular elements of society in the community hierarchy such as giving scientists a more powerful or influential voice than the clergy or other traditional sources of wisdom. This section will illustrate the response of religious leaders and traditionalists against these changes to community power, knowledge and political structures.

Insular communities with well-established moral traditions and economic or political practices find the march of what they see as immoral secular modernisms to be an invasion of established tradition. Fundamentalists act as defenders of their community, attacking political

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outsiders that they see as attempting to dominate their form of secular religious life. The corollary to this is that fundamentalists try to replace the overarching authority of the secular state with a theocratic government more in line with their religious beliefs. To this end they focus on gaining control of the state, either through existing political means or through more militant activities (Fox and Sandler 2004, 83-115; Seul 1999, 559).

In this framework, religious agitators are actively impeding what they consider immoral progress. At first glance, this appears similar to the framework illustrated in the section on Islamic Economics but they are different in one key aspect. Although both frameworks have religious actors attempting to insulate themselves from intrusion, the Islamic economic system is an attempt to construct a religious alternative to modern economics while the other framework has religious actors actively trying to hold on to tradition and religious supremacy. It does not attempt to construct an alternative that conforms to their faith. Concessions to modernity are seen as heretical to religious ideologies and indeed, religious backlash could be an inevitable result of modernity outpacing that ability of inflexible ideologies to adjust to it (Armstrong 2004). This overt hostility to modernization makes it difficult to implement economic and political reforms necessary for modern economic development.

1.4 Religion as a Benefit to Economic Development

The case for religion as a detriment to economic development is not wholly concrete. Several scholars have looked into the effects of religion and found little to no detrimental effects and some potentially beneficial ones. This section outlines the opposing views, and indicates how religion might be beneficial to economic growth.

1.4.1 Religion as a Moral Codification

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This perspective hinges on the idea that religion does not help with economic development directly but it does improve economic outcomes by fostering traits in individuals that are helpful to economic interactions between the members of the faith. Beliefs in a reward or punishment in the afterlife in the wake of certain actions, for example, might encourage people to be more honest or thrifty; provided that such traits are encouraged as part of the religious ethos. This aspect of religious advantage differs between faiths, with those faiths that place a greater emphasis on wealth accumulation having a greater advantage than more fundamentalist sects (Lehrer 2004, 14-17)

1.4.2 Religious Promotion of Industry

It has also been argued by prominent political scientists that specific religions are better at promoting overall economic health than others. Max Weber famously argued that western society owes its apparent economic superiority over the rest of the world, largely to the Protestant work ethic. His argument was that capitalism works through not just the construction of economic institutions but also through a shared ethos that encourages people to be industrious and to participate in the capitalist marketplace. It is this ethos that legitimizes the institution and creates the motivation for people to participate and work in the economy. If people do not possess this industrious spirit, the whole economic enterprise falls apart because no one is willing to participate in the process of maintaining it. Not only that, but capitalism only works if people continue to work towards enriching themselves so as to be able to afford the goods and services that are necessary for their advancement. It implies, by extension, that it is the duty of the participating members of a capitalist economy to industriously pursue their own self-interest and that not to do so would be an abdication of civic responsibility.

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Weber then argued that religious conviction was one mechanism, if not the most important mechanism, for promoting this civic responsibility evidenced by the work ethic promoted in the ascetic Protestant faith. His argument hinges on the idea that Protestants are theologically obligated to make the greatest possible contribution to the world before dying and that this led them into highly organized societies. God ordained that the faithful must work and so they did, and that industrious spirit combined with a near fanatical organization allowed for distinct economic advantages in the competition necessary for economic success in a capitalist society.

"It is true that the usefulness of a calling, and thus its favour in the sight of God, is measured primarily in moral terms, and thus in terms of the importance of the goods produced in it for the community. But a further, and, above all, in practice the most important, criterion is found in private profitableness. For if that God, whose hand the Puritan sees in all the occurrences of life, shows one of His elect a chance of profit, he must do it with a purpose. Hence the faithful Christian must follow the call by taking advantage of the opportunity" (Weber 1920, 108)

Weber's logic can be applied beyond a simple exultation of Protestantism over its rivals however. It can be expanded to include any socio-political or religious institution. As long as a religion has a plausible claim to having the effect of instilling industriousness, its members would enjoy a similar competitive advantage. Indeed, this appears to be the case when religions that are better at promoting industriousness are measured against those that do not (Lehrer 2004, 14-17) Thus, if a reasonable doctrinal case could be made for Islam, Hinduism, Shinto etc., then over time, assuming the teaching remained relatively stable, we would expect to see greater economic success in those groups that instilled this ideology.

1.4.3 **Plausibility**

Both sides of Weber's argument have a decent claim on plausibility. Hypothesis one, can be referred to as the positive impact hypothesis. This hypothesis is supported by the work of

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Weber who has observational evidence that some religions have an economic advantage due to their ethos. This logic can be extended outside the realms of the Protestant advantage that is central to his work and applied to any religion in which one could make an observational case for economic advantage. Additionally, religion as a moral codification has some anecdotal elements. It has been argued for centuries that religion makes people behave better and that the values that it promotes are an ultimate advantage for the members of the faith.

Weber's hypothesis that certain faiths promote industrial activity is based on his personal observation and has little empirical basis. When modern scholars attempted to test his hypothesis they could find no connection between the Protestant faith and industriousness (Cantoni 2014). While this may indeed make a difference for individuals, it is difficult to show a widespread economic effect. The moral codification argument also seems to hold little water. While this may be true in small communities, scholars have shown that these communities often clash with other communities of faith over law, faith, government and a host of other divides leading to civil war and strife when the clashes become severe enough. These clashes among religious groups that cause friction, lack of cohesion and violence would likely offset any positive economic effects that the members of these insular communities might gain through interacting with one another.

Hypothesis two can be thought of as the negative impact hypothesis. The arguments for why religion would be a disruption carry a much greater sense of plausibility. It is not difficult to find examples of religious organizations opposing the adoption of new technologies or opposing the adoption of health practices because they violate some sacred dogma. One need look no further than the fundamentalist opposition to abortion in the United States or the Catholic Church's opposition to condoms for combatting AIDS in Africa to see that religion often backlashes against the adoption of certain practices. While the existence of such opposition does

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not necessarily show an economic effect, it does not take much a stretch of the imagination to create a plausible scenario that the prevalence of AIDS in Africa retards economic modernization or that the problem might be exacerbated by religious opposition to using sexual protection. The existence of Islamic Banking, just by itself, shows that people change their economic behavior to conform to religious practices, at least within some Muslim communities. The best supported of these hypotheses is the societal disruption hypothesis. The contention that high levels of societal religiosity correlates to higher levels of societal violence is well supported by empirical evidence. Knowing that civil war is bad for economic modernization is also well supported. Since these two contentions are empirically supported then it is easy to construct the causal chain of logic leading from higher religiosity to civil war to economic downturn. Thus, my hypothesis is that due to its negative externalities, higher levels of government support for religion will slow economic modernization over time.

So there are two claims being tested. Hypothesis one: That religion has a positive impact on economic development; and Hypothesis two: That religion has a negative impact on economic development. This paper will test those hypotheses against each other by examining levels of government support for religion in society, and provide quantitative evidence indicating which hypothesis is correct.

2.1 Methodology

This study uses a Large-N regression analysis using data from the Religion and State data archives. The data is designed to measure the amount of government promotion of, and involvement in, perpetuating a religious ideology. The use of a large N linear regression study across multiple cultures and religious faiths is designed to control for potential social contaminants. While it is possible to approach this topic through a qualitative approach, such

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approaches are vulnerable to the criticism that their discoveries are unique to that particular culture or faith. Additionally, a Large N regression study allows me to examine data over the course of several years for a large number of countries. Since I can expand the data beyond a single case this should give a much clearer and more robust picture than could be gleaned from a single case study. This study uses an OLS regression model in order to control for time during the regression analysis. Each variable runs from the year 1990-2014, a time frame chosen primarily due to restraints in the datasets that were used in the regression analysis. This study examined 171 different countries using 6 different indicators of government support taken from the Religion and State dataset. This data was compiled by religious scholars Johnathan Fox and Shmuel Sandler at Bar Ilan University in Israel. The data subdivides into three broad categories Official Religion, Religious Support, and religious Discrimination. This study uses the religious support variables which measures the entanglement between government and religions. The specific variables from this set are outlined below:

1) Laws respecting religious practice or proscribing religious rules
2) Direct grant to religious organizations
3) Religious requirements to hold government office
4) Religious education in public schools
5) The existence of blasphemy laws protecting minority faith or religious leaders
6) Other religious prohibitions or mandatory practices

Each of the variables is binary where countries that have a certain characteristic are coded as a 1 while those that do not are coded as a 0. Taken together these variables offer a good picture of whether or not a government is supportive of religion. Most of these variables were chosen

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because they represent direct legal restrictions on or the creation of special legal privileges for a specific religion. The variable regarding religious education is a more subtle measure of government involvement in religion. If a government mandates religious instruction then it indicates that even without laws regarding religion, it at least has given a tacit endorsement to a religious ideal and that it is being presented to students as factually accurate, demonstrating an institutional level belief in and support of a specific faith.

Variable Justification

1) **Laws respecting religious practice or proscribing religious rules:** This variable was chosen because it is a single direct measure of government support of religion. It shows institutional bias towards religious faith and indicates whether religious dogma has been codified into legal offenses.
2) **Direct grants to religious organizations:** The presence of direct financial support for religious organizations indicates that, even without creating legal restrictions on behaviors, the government endorses religious ideas and grants them special status. This indicates an institutional bias towards religious practice.
3) **Religious requirements to hold government office:** This indicates that a government is directly responsive to religious organizations. Religious requirements to hold office demonstrate that government leaders place a higher value on the views expressed by religious people rather than those expressed by secular thinkers and indicate that policy will be more responsive to religious dogma.
4) **Religious education in public school:** Government requiring religious instruction in school indicates that religious claims are considered factual and just as important as

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secular subjects. If the ideology restriction hypothesis is correct, it should be indicated in the results from this variable.

5) **The existence of blasphemy laws protecting minority faith and religious leaders:** This indicates that religion as a whole has a high degree of salience within society and that dogma and religious opinion are insulated from criticism which will give it a higher degree of influence over political policy

6) **Other religious prohibitions and mandatory practices:** This variable allows for a general measure of religious prohibition and takes into account other factors that could indicate government support of religion not covered under the above variable set.

The Religion and State dataset is one of the largest and most comprehensive datasets for the purpose of studying religion in the world. It is recommended by previous studies dealing with religion and economics as being extremely reliable (Barro and M. McCleary 2003) and due to its relative youth, has been somewhat underutilized in the study of religion. Since the data is so robust, it allows for very specific measures of religiosity and can easily breakdown beyond macro level religious population analysis and look at specific measures of religiosity in specific cultural or political contexts.

The economic variables are taken from two datasets that measure international economics and development. The first is the World Bank from which I have used the following measure of economic growth:

1) Measuring the value added from industry per year (Percentage)
2) Measuring the annual growth of the manufacturing sector (Percentage)
3) Annual GDP Growth (Percentage)

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These variables were chosen because they represent a year to year change across large segments of the economy and unlike simply correlating to GDP growth which can rise and fall due to a variety of factors these measures change in response to measures of production which indicates not just investment or more monetary spending by the population but an actual change in productivity which measures economic health with greater specificity.

Variable Justification

1) **Measuring the value added from industry per year:** This variable is used to measure economic output of industry which indicates how well the country can produce and sell the products available to it. Industrial output is also used as an indicator of development and has a direct impact on other broader measure of economic success including GDP.
2) **Measuring annual manufacturing center growth:** This is a more specific measure of industrial output and health. It focuses specifically on manufactured goods and indicates the level of economic utility that can be utilized. Slower growth indicates either a lack of resources, or an inefficient allocation of existing resources both of which might be affected by government policy.
3) **Annual GDP Growth:** This is a standard measure of economic success. Higher levels of GDP growth indicate more overall economic activity. This is a broad measure of economic health with higher levels of growth indicating healthier levels of economic activity.

Finally, I implemented several control variables from a variety of different data sources. These variables control for Education, Population, Literacy, and Regime Type. The data was generated using the NewGene data compilation tool and taken from the Polity IV and the World Bank World Development Indicators datasets:

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1) Polity Score (Polity IV)

2) Literacy (WDI)

3) Government education expenditure (WDI)

4) Annual % change in trade (WDI)

5) Population (WDI)

Variable Justification

1) **Polity Score:** I used the Polity IV regime score for two main reasons. First, it is calibrated to specifically measure regime type on a sliding scale and the degree of of democracy can be indicated by a host of factors that determine an overall score. This is preferable to a binary measure of democracy in which countries either are or are not democracies. Second, because Polity is a well-established database and has been maintained for a long period of time it is one of the few measures of democracy that has data that can cover such a large range of countries over such a long period of time. Polity is measured on a 21-point scale ranging from -10 to 10 with lower numbers indicating higher levels of autocracy while higher numbers indicate greater levels of democracy.

2) **Literacy:** This variable is used as an indirect measure of education. Because "education" is difficult to quantify in large data projects and data is often subdivided into increasingly specific categories, a more broadly applicable measure of education is needed to act as a control variable for studies that do not directly examine education. It would take dozens of controls in order to account for age differences, school rankings, test scores etc. Even basing the education measure on just college graduation potentially biases itself by a number of factors up to and including age. Literacy is an accepted catch all that can be tested across age groups, genders and other potential cleavages making it a very versatile measure of

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education. This variable is a percentage value measuring literacy levels of adults over the age of 15. It measures primarily the primary school education outcomes and basic numeracy as compiled by UNESCO.

3) **Government education expenditure:** Another broad measure of education. Instead of measuring outcomes for individuals like the literacy variable, this instead measures the levels of government support for education. Taken together, literacy and government education expenditure provide a good control for education in the regression model.

4) **Annual percentage change in trade:** Trade is an important indicator of economic health. It accounts for a huge section of a state economy and a shift in trade can affect everything from product pricing, to employment, to manufacturing. It is important that a factor not entirely within a single government's control that has such wide ranging implications is controlled for when measuring the impact of government support for religion on economic development.

5) **Population:** Population is a huge factor in determining economic output. Raw labor is one of the most important resources for manufacturing, especially in countries that have yet to develop their economies to the point that they have high levels of automation in manufacturing sectors. Thus, controlling for differences in population is essential for model accuracy.

Summary of Statistics

	Mean	Standard Deviation	Minimum	Maximum	Count
Laws Respecting Religion	0.362	0.481	0.000	1.000	4176
Direct Grants	0.280	0.449	0.000	1.000	4174
Religious Requirements	0.144	0.351	0.000	1.000	4175
Religious Education	0.674	0.469	0.000	1.000	4175

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Blasphemy Laws	0.169	0.375	0.000	1.000	4130
Other	0.203	0.402	0.000	1.000	4175
Industry	4.022	11.019	-79.518	204.590	3481
Manufacturing	3.706	11.713	-61.930	375.158	3244
Growth	3.869	7.540	-64.047	149.973	3853
Polity	14.143	6.731	1.000	21.000	3892
Literacy	9.006	26.148	0.000	99.998	4017
Education	2.173	2.708	0.000	44.334	4017
Trade	73.276	53.016	0.000	531.737	4017
Population	35793816.912	1.312e+08	0.000	1.360e+09	4017
N	4480	4480	4480		

The table above provides an overall summary of the statistical parameters of the data. It notes the number of observations for the variables, the average score for each variable, standard deviations, and minimum and maximum values.

3.1 Results

These results are surprising as the correlations discussed above make a strong case for why religion should have an impact on economic activity. My hypothesis assumed that these correlations would be more robust if there was a greater institutional support for religion. If such a correlation was existent, then the logical conclusion is that if the defining variable, religion, was supported at an institutional level, the effects on economic health would be more pronounced. This does not appear to be the case. Most of the variables used to measure government support for religion do not reach statistical significance when applied to any of the variables measuring economic modernization. Government Support of religion seems to have little impact on manufacturing output, industrial output, or growth.

The only variable that did achieve statistical significance is the variable for religious education as related to industrial output illustrated in table 3.2. There was a slight positive relationship between this variable and industrial output which may lend credence to the idea that religion has a positive effect on modernization. This lends credence to the ideas put forward by (Brown and Taylor 2007; Franck and Iannccone 2013) where religious schools actually increase

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access to education and thus make for more productive workers who can more easily learn and adjust to the processes required for creating products. If this was the case, however, then we would also expect this variable to achieve statistical significance when compared to measures of manufacturing output, but this did not happen. Another explanation may simply be that countries that have greater access to education are more likely to have developed robust industrial capacity. Since religious organizations run schools and provide the institutional framework for developing education, then these two factors link indirectly. In this conception, the quality of the education may not matter as much as the gap between having an education and not. Thus, even a substandard education where certain concepts are not adequatly explored wouldn't be much of a hinderance to unskilled industrial labor. Having a basic understanding of mathamatics and a higher degree of literacy is probably sufficient to offset any disadvantage from incorrect ideas about biology or history.

The other data may have failed to reach statistical significance because the measures of government support for religion are not yet well defined enough in order to be accurate. The data is currently separated into simple binary categories but this does not measure the robustness of any specific variable. A measure of how many laws there are with respect to religion for example or a system for rating the severity of punishment may yield different results. Education variables have similar problems, a measure of how much of a student's time is devoted to religious study as opposed to secular education may reveal correlations where none existed before. It may also be prudent to examine which subjects are the most affected by religious education and see if there is a corresponding lack of professionals in fields related to those subjects. If a religious doctrine prohibits the study of evolution, for example, then there may be a smaller number of students capable of receiving a medical degree or researching biology.

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An alternative explanation is that religion takes a subservient role to economic interests. While religion does prohibit certain behaviors or practices it seems plausible that people are willing to disregard religious directives when they clash with economic self-interest or wellbeing. Many religions have proscriptions on having premarital sex, but it hardly seems to slow the rate of procreation outside of wedlock. It seems likely that similar systems of rationalization or disregard are applied when religious directives impugn economic advantage.

It may also be that many of the laws and support for religion do not take a form that is consistent with economic restrictions. A law that declares it is illegal to leave the Muslim faith as exists in Malaysia, for example, does not declare that all its adherents must live a lifestyle that is perfectly consistent with strict interpretation of the Quran. It may be that many adherents to the faith do so due to political and social pressure but may not go out of their way to conform action to religious doctrine. As in the case of Islamic banking, there may also be workarounds for religious restrictions that behave in much the same way as the secular institutional structures though maintaining a semantic difference. Any or all of these things may combine in order to offset any of the potential economic costs of religion. Indeed, as Weber might suggest there may be a significant difference based on which religions we measure. Many scholars link the Muslim world to greater sectarian violence (Toft 2007) and we have seen above that the practice of that faith can alter how Muslims behave economically. Perhaps a subset study of Muslim majority countries may also reveal a greater effect from religion.

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Effect of Government Support on Manufacturing Output	(1) Manufacturing	(2) Manufacturing	(3) Manufacturing	(4) Manufacturing	(5) Manufacturing	(6) Manufacturing
Religious requirement to hold government office			0.710 (0.62)			
Religious education is present in public schools				0.418 (0.63)		
Blasphemy laws protecting minority religions or religious figures					-0.006 (0.95)	
Other religious prohibitions or practices that are mandatory						1.202+ (0.69)
Laws Respecting Religion	-0.529 (0.63)					
Direct grant to religious organizations		0.380 (0.49)				
Polity Score	-0.102+ (0.06)	-0.103+ (0.06)	-0.094 (0.06)	-0.102+ (0.06)	-0.105+ (0.06)	-0.100+ (0.06)
Literacy	0.002 (0.01)	0.002 (0.01)	0.002 (0.01)	0.002 (0.01)	0.002 (0.01)	0.002 (0.01)
Government Education Expenditure	-0.048 (0.07)	-0.051 (0.07)	-0.054 (0.07)	-0.052 (0.07)	-0.021 (0.07)	-0.053 (0.07)
Trade	0.011+ (0.01)	0.011 (0.01)	0.011+ (0.01)	0.011 (0.01)	0.010 (0.01)	0.012+ (0.01)
Population	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)
Constant	4.842*** (1.16)	4.549*** (1.11)	4.425*** (1.18)	4.362*** (1.04)	4.710*** (1.02)	4.396*** (1.11)
Observations	2886	2886	2886	2886	2800	2886

Table 3.1 shows no statistical significance between any of the government support variables and manufacturing output. Coefficient reported. Robust standard error in the parenthesis. Level of significance ***p< .001; **p< .01; *< .05; + p< .10

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Effect of Government Support on Industry Output	(1) Industry	(2) Industry	(3) Industry	(4) Industry	(5) Industry	(6) Industry
Direct grant to religious organizations		-0.299				
		(0.70)				
Religious requirement to hold government office			0.643			
			(0.75)			
Religious education is present in public schools				2.096*		
				(0.99)		
Blasphemy laws protecting minority religions or religious figures					0.804	
					(0.95)	
Other religious prohibitions or practices that are mandatory						0.308
						(0.66)
Laws respecting Religion	-0.206					
	(0.81)					
Polity Score	-0.106+	-0.103	-0.101	-0.121*	-0.122*	-0.105+
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Literacy	0.000	0.000	0.000	-0.000	-0.001	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Government Education Expenditure	0.024	0.025	0.021	0.018	0.033	0.024
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Trade	0.005	0.005	0.005	0.004	0.004	0.005
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Population	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Constant	5.325***	5.273***	5.087***	4.110**	5.516***	5.190***
	(1.17)	(1.18)	(1.28)	(1.32)	(1.16)	(1.24)
Observations	3059	3058	3059	3059	2958	3059

Table 3.2 shows that religious education achieves statistical significance when compared to industry output. The data indicates that this is effect is likely to increase industrial output. Coefficient reported. Robust standard error in the parenthesis. Level of significance ***p< .001; **p< .01; *< .05; + p< .10

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Effect of Government Support on GDP Growth	(1)	(2)	(3)	(4)	(5)	(6)
	GDP growth	GDP growth	GDP growth	GDP growth	GDP growth	GDP growth
Laws Respecting Religion	-0.375					
	(0.42)					
Direct grant to religious organizations		-0.001				
		(0.50)				
Religious requirement to hold government office			0.635			
			(0.40)			
Religious education is present in public schools				0.490		
				(0.41)		
Blasphemy laws protecting minority religions or religious figures					-0.182	
					(0.61)	
Other religious prohibitions or practices that are mandatory						0.865^{+}
						(0.46)
Polity Score	-0.031	-0.029	-0.023	-0.032	-0.030	-0.030
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Literacy	0.006	0.006	0.006	0.006	0.006	0.006
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Government Education	-0.050	-0.052	-0.057	-0.054	-0.048	-0.055
Expenditure	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Trade	0.022	0.022	0.022	0.022	0.022	0.023^{+}
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Population	0.000^{***}	0.000^{***}	0.000^{***}	0.000^{***}	0.000^{***}	0.000^{***}
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Constant	2.712^{***}	2.548^{**}	2.383^{**}	2.267^{*}	2.687^{**}	2.405^{**}
	(0.80)	(0.86)	(0.89)	(0.88)	(0.85)	(0.89)
Observations	3385	3385	3385	3385	3279	3385

Table 3.3 shows no statistical significance between any of the government support variables and economic growth. Coefficient reported. Robust standard error in the parenthesis. Level of significance ***p< .001; **p< .01; *< .05; + p< .10

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4.1 Conclusion

It seems clear that belief in the supernatural is not likely to abate among humans any time soon. It is also quite clear that such a culturally significant institution as religion has humongous implications for the study of people's economic activities. One needs look no further back than the 20th century to find instances of religious bias, hatred, economic scapegoating and a host of other factors that embroiled humanity in turmoil that had as yet been unimagined. It is also well documented that most of the industrialized countries in the world have become over time less religious as evidenced by the rise of unaffiliated citizens in the US (Downey 2017) in the last decade as well as declining religiosity across western Europe (Sherwood 2018). However, this massive shift in the religious landscape of the world does not appear to have had much impact on economic development.

The way people behave personally or socially may be altered or shifted due to their religious faith but any government support and attempt to cultivate this change in behavior seems to have little to no impact on how people will behave economically. Despite differences in education and the potential proscription of certain economic practices, religious communities seem to be just as capable as secular ones of growing their economies and developing industry and manufacturing. However, it is still apparent that the heavily religious world does tend, on average to remain poorer and less developed than its counterparts. While religion may not be the culprit directly, this disparity continues to deserve examination. In this study I was specifically looking at measures of government support for and protection of religion at an institutional level. None of the measures that I used were designed to measure the piety or religious conviction of the population at large, and that may not always be reflective of the levels of government support.

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These results indicate that if religion has any real effect on economic development it is not through the vehicle of government imposition. However, while government support may not be a decisive factor in why modernization moves slowly, it may still be a reflective one. Government support of religion and the creation of institutions and laws to strengthen it may simply be a reflection of the religious make-up of the country and a response to the political reality of a large and religiously homogenous segment of the population that wants religious institutions to have a place in government. Further research should examine how a population's religious convictions and piety may be more important factors. Religion is not a binary state of affairs where one simply has it or not. People may range in their convictions from the culturally religious (those that use religion to insinuate themselves into cultural traditions of a nation) to the fundamentalist (those that take their religious holy texts and rights to be absolutely true and follow the strict interpretation of holy writ). Knowing how these different states of religious conviction affect economic modernization is the next step in understanding the effects of religion on modernization.

Where people are more fundamentalist and thus more willing to acquiesce to strict interpretation of doctrine there may be different results than in places where many people are religious, but do not adhere to a fundamentalist interpretation or simply consider religion to be a social construct allowing for more interpersonal interaction than a guiding set of principles that they allow to dictate their behavior. In such circumstances, economic behavior may be markedly different. I suggest that the next steps for research will be to look at how these individual level perceptions of religion change people's economic behavior. Current research indicates that the levels of religiosity are reduced after a country develops economically (Barro and McLeary, Religion and Political Economy in an International Panel 2006) but there is little research done

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that measures whether the levels of religiosity, as perceived by individual economic actors, changes their economic behavior. In order to better understand how these two titans of human behavior interact, knowing how individual religiosity and economic behavior influence each other seems essential for a more complete understanding of both political decisions as well as economic outcomes.

This suggestion that religion may be used to induce people to act against their own economic self-interest is not a new one. Karl Marx himself famously wrote:

"Religious suffering is, at one and the same time, the expression of real suffering and a protest against real suffering. Religion is the sigh of the oppressed creature, the heart of a heartless world, and the soul of soulless conditions. It is the opium of the people.

The abolition of religion as the illusory happiness of the people is the demand for their real happiness. To call on them to give up their illusions about their condition is to call on them to give up a condition that requires illusions. (Marx 1844)*"*

As of yet, however, there is very little research that has been done to discover if this is empirically true. The megalith that is religious belief needs to be examined for its efficacy to humanity, if it has economic value and does change the behaviour of national economies, for better or worse, then such a thing must be understood. While current economic theory works primarily through the lens of rational calculation, it ignores the vital fact that irrational belief in the divine is a staple of the human condition, our understanding of what is needed for development, economic expansion and our explanations of human behaviours will always be woefully incomplete if this piece of the puzzle is not further examined. My study is only one small piece of that massive and essential undertaking.

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Works Cited

Armstrong, Karen. 2004. "Resisting Modernity: The Backlash Against Secularism." *Harvard International Review*, January 6.

Barro, Robert, and Rachel M. McCleary. 2003. *Religion and Economic Growth.* Scholarly Inquiry, Boston: Harvard University.

Barro, Robert, and Rachel McLeary. 2006. "Religion and Political Economy in an International Panel." *Journal for the Scientific Study of Religion* 149-175.

Beck, Thorsten, Asli Demirgüç-Kunt, and Ouarda Merrouche. 2013. *Islamic Vs Conventional Banking: Buisness Model, Efficiency, and Stability.* World Bank Report, Tilburg: Journal of Banking and Finance.

Brown, Sarah, and Karl Taylor. 2007. "Religion and Education: Evidence from the National Childhood Development Study." *journal of Economic Behavior & Orginization* 439-460.

Cantoni, David. 2014. "The Economic Effects of the Protestant Reformation: Testing the Weber Hypothesis in German Lands." *Journal of the European Economic Association* 561-598. doi:doi.org/10.1111/jeea.12117.

Chiswick, Carmel. 2003. *An Economic Perspective on Religious Education: Complements and Substitutes in a Human Capital Portfolio.* Discussion Paper, Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor.

Deckman, Melissa. 2002. "Holy ABCs! Th Impact of Religion on Attitutdes about Education Policies." *Social Science Quarterly* 473-487.

Dollar, David, and Art Kraay. 2004. "Trade, Growth, and Poverty." *The Economic Journal* 22-49.

Downey, Allen. 2017. "The US Is Retreating From Religion." *Scientific American*, October 20.

Ebrahim, Shahid, Seema Makhdoomi, and Mustapha Sheikh. 2012. *The Political Economy and the Perennial Underdevelopment of the Muslim World.* Business School Working Paper, Bagor: Bangor University.

Edwards, Sebastian. 1998. "Openness, Productivity, and Growth: What do we really know?" *The Economic Journal* 383–398. doi:doi.org/10.1111/1468-0297.00293.

Fangjun, Cao. 2009. "Modernization Theory and China's Road to Modernization." *Chinese Studies in History* 7-16. doi:10.2753/CSH0009-4633430101.

Fox, Johnathan. 2001. "Religion as an Overlooked Element of International Relations." *International Studies Review* 53-73.

Franck, Raphael, and Laurence Iannccone. 2013. "Religious decline in the 20th Century West: Testing Alternative Explanations." *Public Choice* 385-414.

Friedmann, Harriet, and Jack Wayne. 1977. "Dependency Theory: A Critique." *Canadian Journal of Sociology* 399-416.

DOI:10.6814/THE.NCCU.IMPIS.003.2019.A06

National Chengchi University

Gleaser, Edward L, and Bruce Sacerdote. 2008. "Education and Religion." *Journal of Human Capital* 188-215.

Hasan, Zulkifli Bin. 2016. "From legalism to value-oriented Islamic finance practices." *Humanomics* 437-458.

Hellmann, Thomas, Kevin Murdock, and Joseph Stiglitz. 2000. "Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?" *The American Economic Review* 147-155.

Hitchens, Cristopher. 2007. *God is Not Great: How Religion Poisons Everything.* Atlantic Books.

Hussain, Mumtaz, Asgar Shahmoradi, and Rima Turk. 2016. "An Overview of Islamic Finance." *Journal od Economics and Finance .*

Imam, Patrick, and Kangni Kpodar. 2016. "Islamic Banking: Good for growth?" *Economic Modelling* 387-401.

Innaccone, Laurence. 1998. "Introduction to the Economics of Religion." *Journal of Economic Liturature* 1465-1495.

Kalleberg, Arne, and Till Von Wacther. 2018. "The U.S. Labor Market During and After the Great Recession: Continuities and Transformations." *The Russell Sage Foundation Journal of the Social Sciences* (NCBI) 1-19.

Kammer, Alfred, Norat Mohamed, Marco Piñón, Ananthakrishnan Prasad, Cristopher Towe, and Zein Zeidane. 2015. *Islamic Finance: Opportunities, Challenges and Policy Options.* IMF Staff Discussion Note, International Monetary Fund.

Kang, Seonjou, James Meernik. 2005. "Civil War Destruction and the Prospects for Economic Growth." *The Journal of Politics* 88-109. doi:doi:10.1111/j.1468-2508.2005.00309.x.

Khan, Feisal. 2010. "How 'Islamic' is Islamic Banking?" *Journal of Economic Behavior & Organization* (Journal of Economic Behavior & Orginization) 805-820.

Krauss, Glenda, Simon McGrath, Il-haam Petersen, and Michael Gastrow. 2015. "Higher education and economic development: The importance of building technological capabilities." *International Journal of Economic Development* 22-31.

Kuran, Timur. 1996. "The Discontents of Islamic Economic Morality." *Linkages Between Economics and Religion* 439-442.

Kuran, Timur. 1993. "The Economic Impact of Islamic Fundementalism." In *Fundamentalisms and the State: Remaking Polities, Economies, and Militance*, by M Marty and S Appleby, 302-341. Chicago: Chicago University.

Lehrer, Evelyn. 2004. *Religion as a Determinent of Economic and Demographic Behavior in the United States.* Discussion Paper, Bonn: Forschungsintitut zur Zukunft der Arbeit Institute for the Study of Labor.

DOI:10.6814/THE.NCCU.IMPIS.003.2019.A06

Levy, Brandon. 2007. "The Role of Globalization in Economic Development." *SSRN Electronic Journal* 137-143.

Marx, Karl. 1844. "A Contribution to the Critique of Hegel's Philosophy of Right." In *Philosophy of Right*, by Georg Hegel. Paris: Deutsch-Französische Jahrbücher.

Mocan, Naci, and Pogorelova Luiza. 2014. *Compussory Schooling and Formation of Belifes: Education, Religion, and Superstition.* NBER Working Series Paper, Cambridge : National Beureu of Economic Research.

Montalvo, José G, and Marta Reynal-Querol. 2000. *A Theory of Religious Conflict and Its Effect of Growth.* IVIE, Instituto Valenciano de Investigaciones Económicas, 1-26.

Montalvo, José G, and Marta Reynal-Querol. 2003. "Religious Polarization and Economic Development." *Economics Letters* 201-210. doi:10.1016/S0165-1765(03)00080-6.

Montalvo, José, and Marta Reynal-Querol. 2002. *Why ethnic fractionalization? Polarization, ethnic conflict and growth.* Economics Working Paper, Universitat Pompeu Fabra.

Noland, Marcus. 2005. "Religion and Economic Performance." *World Development* 1215-1232.

Obiyathulla, Ismath Bacha, Abbas Mirakhor, and Hossein Askari. 2018. "Risk Sharing in Corporate and Public Finance: The Contribution of Islamic Finance." *PSL Quarterly Review* 187-213.

Park, Julie J. 2013. *Religion and Income Inequality: The Paradox of the South.* September 28.

Pennycook, Gordon, James Cheyne, Paul Seli, Derek Koehler, and Jonathan Fugelsang. 2012. "Analytic and Cognitice Styles Predicts Religious and Paranormal Belief." *Cognition* 335-46.

Piatti, Marco, and Benno Togler. 2013. "Extraordinary Wealth, Globalization, and Corruption." *Review of Income and Wealth* 341-359. doi:10.1111/roiw.12027.

Pieterse, Jan. 1988. "A Critique of World Systems Theory." *International Sociology* 3 (3): 251-266.

Popper, Helen, and David Parsley. 2018. "Blue States and Red States: Business Cycle Divergence and Risk Sharing." Economic Study. doi: http://dx.doi.org/10.2139/ssrn.3117556.

Reyes, Giovanni. 2001. "Four Main Theories of Development: Modernization, Dependancy, World Systems and Globalization." *Nómadas. Revista Crítica de Ciencias Sociales y Jurídicas* 1-16.

Robinson, William. 2011. "Globalization and the sociology of Immanuel Wallerstein: A critical appraisal." *International Sociology* 723-745. doi:10.1177/0268580910393372.

Rostow, Walt. 1960. *The Stages of Economic Growth: A Non-Communist Manifesto.* Cambridge: Cambridge University Press.

Seul, Jeffery. 1999. "'Ours is the Way of God': Religion, Identity, and Intergroup Conflict." *Journal of Peace Research* 553-569.

Sherwood, Harriett. 2018. "'Christianity as the default religion is gone': The Rise of Non-Christian Europe." *The Guardian*, March 21.

DOI:10.6814/THE.NCCU.IMPIS.003.2019.A06

Smith, Gregory, Claire Gecewicz, and Anna Schiller. 2017. *In America, Does More Education Equal Less Religion?* Polling Report, Pew Research Center.

Smith, Tony. 1979. "The Underdevelopment of Development Liturature: The Case of Dependancy Theory ." *World Politics* 247-288.

Sowell, Thomas, interview by Peter Robinson. 2016. *Uncommon Knowledge* (November).

Stiglitz, Joseph. 1992. "Capital markets and economic fluctuations in capitalist economies." *European Economic Review* 269-306.

—. 2010. "Freefall: The Sinking of the Global Economy." Queensland: ABC, july 26.

—. 2003. *Globalization and its Discontents .* W. W. Norton & Company.

Sukmana, Raditya, and Mansor H Ibrahim. 2017. "How Islamic are Islamic banks? A non-linear assessment of Islamic rate – conventional rate relations." *Economic Modelling* 443-448. doi:https://doi.org/10.1016/j.econmod.2017.02.025.

Tipps, Dean C. 1973. "Modernization Theory and the Comparative Study of Societies: A Critical Perspective." *Comparative Studies in Society and History* 15 (2): 199-226.

Toft, Monica. 2007. "Getting Religion? The Curious Case of Islam and Civil War." *International Security* 97-131.

—. 2011. "Religion and Civil Wars: Next Steps?" *Religion and International Relations: A Primer for Research.* South Bend: University of Notre Dame. 142-152.

Wallerstein, Immanuel. 1974. *The Modern World System: Capitalist Agriculture and the Origins of the European World Economy in the Sixteenth Century.* New York: New York Academic Press.

Wallerstien, Immanuel. 2013. "World-systems analysis." *Sociopedia.isa* 1-8. doi:DOI: 10.1177/2056846013114.

Weber, Max. 1920. *The Spirit of Capitalism.* Routeledge.

DOI:10.6814/THE.NCCU.IMPIS.003.2019.A06