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Behavior, religion, and socio-economic development: a synthesized theoretical framework

Mohammad Tariq Al Fozaië  ¹✉

Due to theoretical shortcomings, most of the literature that examines the impact of religion on economic well-being fails to distinguish between the religion and the religion constituents. Moreover, the current framework has a narrow focus on economic well-being, does not facilitate for empirical testing, and is troubled by the problem of endogeneity. This paper introduces a framework for the empirical and descriptive study of the impact of religion on socio-economic development. The framework introduced facilitates for the adoption of both inductive and deductive approaches, allowing one to operationalize and analyze the religion itself, to test whether it embodies any principles that might hinder development by facilitating for the construction of a quantitative measure, which seeks to differentiate between the religion and the behavior of its constituents, as well as facilitate for a descriptive study of the religion itself. An example of how to utilize the framework developed is provided for the case of Islam, where the concept of Mafsada, public harm, in the Maqasid of Shariah, the purpose of Islamic jurisprudence, is operationalized, alongside Adam Smith's Worthless Fellow in the Theory of Moral Sentiments, to develop a composite measure whose corollaries represent behavior a worthless fellow might engage in and would subsequently lead to societal harm. These corollaries can also be adopted in an empirical study as independent variables. Moreover, Ibn Khuldon's Theory of Development is also utilized along with Max Weber's Protestant Ethic to facilitate for the study as to why Muslim countries are underdeveloped, and whether their poor development is attributable to Islam, or due to factors relating to culture, justice, politics, and others. This study utilizes a causal research design as it facilitates for better understanding the nature and the extent of the relationship between variables in poorly understood phenomena—behavior, religion, and how, and whether, they can impact development.

¹Universiti Kebangsaan Malaysia, Bangi, Malaysia. ✉email: p86766@siswa.ukm.edu.my

Introduction

It has been argued that Max Weber (1958) was the first to document the impact of religion on economic performance. On the other hand, Iannaccone (1991) argues that Adam Smith rather than Weber was the first to document the relationship between economics and religion. Iannaccone states that: “Smith argued that self-interest motivates clergy just as it does secular producers, that market force constrain churches just as they do secular firms; and that the benefits of competition, the burdens of monopoly, and the hazards of government regulation are as real in religion as in any other sector of the economy” (Ibid, 1991).

This position is supported by Anderson (1988) & Noland (2005), who opine that Adam Smith (1776) was the first to suggest that there is a possible connection between religion and economic well-being evidenced by his writings in “The Wealth of Nations”, where he posits that participation in religious factions has two possible economic benefits to its constituents: 1) being a member of such a sect conveys a positive signal indicating that this individual practices proper risk management, subsequently leading to more efficient resource allocation; 2) membership provides added legal protection for its constituents by “establishing trust and sanctioning miscreants in intragroup transactions”, thereby “reducing uncertainty and improving efficiency” (Noland, 2005).

That said, even though Smith (1776) was the one of the first to suggest the existence of a possible relation between religion & economic performance, it is the views of Weber (1958) in “The Protestant Ethic and the Spirit of Capitalism”, which influenced the field of economics of religion the most. To elaborate, Weber contends that “the Protestant Reformation was critical to the rise of capitalism through its impact on belief systems” (Backhaus, 2010). The core of Weber’s thesis is that the rise of Protestantism lead to a “mental revolution”, which paved the way for capitalism through the creation of various virtues that were conducive to economic growth (Delacroix, 1992).

This new way of thinking, or mental revolution as Delacroix states so eloquently, encouraged individualism, materialism, and frugal behavior. This new behavior was not only brought upon by the shifting mindset, but also by the belief in *predestination* by Calvinists, a sect of Protestantism, where individuals acted in a way to *justify* their place in heaven. Moreover, Protestantism led to the development of individuals who exerted “greater effort in mutual social control, supports institutions more and more critically, is less bound to close circles of family and friends and also holds more homogeneous values” (Arruñada, 2010). In summary, the mental revolution, the belief in predestination, and the prioritization of the community over the family, led to highly cohesive and collaborative Protestant societies, i.e., Northern Europe, which were more developed relative to their Catholic counterparts, i.e., Southern Europe, according to Weber (1958).

Why study economics & religion?

Interest in the field of economics of religion began with Adam Smith, Max Weber, and revived in the modern era by Iannaccone (1998). Researchers today are interested in the field since studying the relationship between economics and religion facilitates for the study of the impact of ‘non-market behavior’ on the economy as it involves, for example, investigating how norms, values, & traditions, found in certain religions, influence human behavior, and what effect such behavioral traits might have on an individual’s attitude towards, for example, risk taking in the stock market—i.e., are religious individuals more risk averse than non-religious individuals, or are they risk seekers?; economists in particular are interested in better understanding the relationship between

religion and economics because of not only how it continues to shape attitudes, beliefs, and values at the individual level, but how it also plays an incessant role as a group identifier on a societal level (Hoffmann, 2013). Furthermore, in studying this field, researchers will be able to investigate how religious beliefs, culture, social norms, or any other non-market influences, may impact economic, social, and political systems.

Another reason interest has been revitalized in this field, is because scholars saw how religion intersected with many other fields such as politics, public economics, economic growth, economic theory et al., and how it is a variable, which can explain many phenomena in those fields—i.e., the protestant ethic led merchants to transfer the traits of honor & integrity from their faith to contracts, becoming more likely to honor contracts than break them. Lastly, interest grew in this field because the relationship between economics and religion has never been clear—opinions were split, results were mixed, and there has always been a gap in literature and a shortcoming in Weber’s thesis, i.e., the consensus is that a relationship exists, but the empirical support is weak.

The different approaches in studying economics & religion

There are two widely accepted approaches to studying the impact of religion on economic performance. The *first* approach involves treating religion as a dependent variable, for example, religiousness is dependent on factors such as the level of income, standard of living, level of education etc. The *second* approach involves treating religion as an independent variable and investigating its impact on economic, social, and political variables. The two approaches are very different from one another, and whilst the former views religion as endogenous, a hypothesis, which is viewed as a component of secularization theory, which itself is a part of the modernization theory and traces its roots to Karl Marx according to Barro and McCleary (2003), the latter approach treats religion as an independent external force, which affects economic and social well-being—among other things. The latter approach is the most widely accepted approach in the field, and it is the approach adopted by Max Weber (1958) and Adam Smith (1776).

As aforementioned, there are two approaches to studying the relation between economics and religion—i.e., religion can either be viewed as the dependent variable or the independent variable. And even though there is a larger theoretical support for the latter, this position is not without its detractors. For example, Lewis (1955) is skeptic of the impact of religious beliefs on economic behavior and argues that “the causality probably ran the other direction”.

What approach does this study adopt?

This paper adopts the approach by Weber (1958) and Smith (1776), embracing the hypothesis that religion can impact a countries level of socio-economic development—i.e., *religion will be studied as an independent variable*. This approach is the most dominant in literature, and it will form the basis of the theoretical and conceptual frameworks to be developed. Regarding the concepts and theories which make up the theoretical and conceptual frameworks, in addition to the theories of Weber (1958) and Smith (1776), which not only focus on the role religion has on development, but also how factors such as culture, social cohesion, and behavior can have an impact as well, the study adopts the theories of Ibn Khuldun and Al Darwish (2004) and Al Ghazaly (1937) to provide an example of how to study the impact of Islam on development. The rationale for selecting the theories

and how they will be conceptualized to study the impact of religion on development will be elaborated upon later in the text.

In summary, the purpose of this paper is to introduce a synthesized framework to facilitate the study of the impact of religion on socio-economic development—herein forward will be used interchangeably with development. Whereas most studies examine the relationship between economics and religion, this paper seeks to introduce a theoretical, conceptual, and methodological framework, which facilitates for the study of whether religion can impact a countries level of development. To achieve this objective, a literature review of some of the current studies, which examine the relationship between religion and economic well-being must be discussed to not only exhibit the limitations of the current studies, but also the limitations of the current framework. Moreover, the theories, which make up the new synthesized framework must be elaborated upon, particularly how they will be conceptualized to facilitate for the study of the impact religion on development. An example of how to utilize this new framework will then be presented, followed by a visual representation of the theoretical and conceptual frameworks. The paper ends with a discussion on the research gaps, contribution, and study implications, which precede the conclusion and a brief discourse on the direction of future research.

Theoretical background—current practices in the field of economics of religion

Max Weber—The Protestant Ethic. Max Weber's (1958) principal theory in "The Protestant Ethic & the Spirit of Capitalism", elaborates upon how informal institutions such as religion can have a significant positive or negative impact on economic development. To elaborate, Weber finds that cultural factors attributable to religious sect's, i.e., Protestantism vs. Catholicism, were the main reason for the contrasting economic performance of Northern and Southern Europe. This theory adds emphasis to the hypothesis that informal institutions such as religion, culture, and norms, can have a positive or a negative impact on development, thereby explaining how two countries following the same religion, can have contrasting levels of development. Weber's theory is a very complex, controversial, and misunderstood theory; it could have as many supporters as opposers. An example of such, whilst Weber argues that the social bond and the collective efforts of the members of Protestant communities in Northern Europe are the primary catalysts for economic growth, through the engagement in economic development behavior, which is in the best interest of the individual, a position shared by Adam Smith who argued in the "Wealth of Nations" that self-interest drives economic growth, Becker & Woessmann (2009) on the other hand argues that Protestant communities were economically well-off relative to their Catholic counterparts not due to Weber's theory, but due to the protestant community members being more literate relative to their Catholic counterparts—i.e., human capital theory. That said, Mosher (2016) states that it is true that literacy contributed to the economic development of Northern Europe, but it is only because Protestantism promoted literacy. Discussing all the supporting and opposing views of Weber's thesis is beyond the scope of this research, what will be discussed, however, is the primary elements of the theory, how is it relevant to this research, its significance to the field, and explore 'some' of the criticisms of the theory.

The Protestant Ethic—what is it? The Protestant Ethic is a work ethic attributable to the Protestant belief of predestination, in particular Calvinism, where followers of this faith are of the belief that God has already decided who goes to heaven and who does not. As such, and to justify their place in heaven, Calvinists

led lives which centered on *worldly asceticism*, having moral obligations to fulfill one's duty in worldly affairs. This belief was "essential for transforming attitudes toward economic activity and wealth accumulation" (Noland, 2005). In short, the Protestant ethic transformed values and attitudes, leading people to engage in economically favorable behavior such as high work ethic, efficiency, thrift, and unobtrusive accumulation and generation of wealth.

The Protestant Ethic—research relevance & application. Max Weber's theory will be utilized in the development of the synthesized theoretical framework because of its prominence—i.e., it is the most widely referenced theory in the field of economics of religion. This theory provides the theoretical basis for studying the impact of the motivational factors, i.e., religion and culture, on development.

The Protestant Ethic—was weber right or wrong? According to Segal (1999), Weber's thesis has been heavily scrutinized since its introduction. He states however that Weber has gathered "as many defenders as opponents, and it would be inaccurate to conclude that the thesis has been refuted, especially when its qualifications are recognized". Blum and Dudley (2001) add to this argument by refining Weber's thesis themselves, arguing that "Protestantism, by rejecting the Catholic sacrament of penance and increasing the individual penalty for defaulting, improved the level of mutual trust and cooperation". They utilize this theory as the basis for explaining why the wages of Protestant cities between 1500-1750 rose, relative to the wages of Catholic cities during the same period.

Regarding the opposing views, Weber's theory has been under scrutiny as early as 1907 and 1909 by Karl Fischer and Felix Rachfahl, who took exception of Weber's *idealistic interpretation of history* (Chalcraft and Harrington, 2001). Krymkowski and Martin (1998) also argue against Weber's thesis, stating that Weber "never proposes religion as an independent variable and, at best is very ambiguous on the issue". Furthermore, the authors add that Weber is more interested in the historical role of ideas, and he intended a cause-and-effect relationship between the Protestant Ethic and capitalism (Ibid, 1998). To add emphasis to their argument, the authors refer to the work of Japanese Scholar Kanai Shinji (1991) who finds that "whereas Weber clarifies an 'affinity between Protestant ethics and the spirit of capitalism'... he does not show corroborating evidence of a historical cause-and-effect relationship between the two" (Krymkowski and Martin, 1998; as cited by Makoto et al., 1993). The authors subsequently reject the view that religion can be seen as an independent variable, calling it, "on the appeal of Weber, somewhat questionable" (Krymkowski and Martin, 1998).

In summary, the discussion on the validity and reliability of Weber's theory extends as far back as Fischer (1907a, 1907b), Rachfahl et al. (1909), Brentano (1916), Robertson (1933), Fanfani (1935), among others, and as recent as Krymkowski and Martin (1998), Spater and Tranvik (2019), among others. Weber himself stated that the phenomenon he is observing, the improved economic fortunes of Protestant cities over Catholic cities, might not be the "cause of the economic conditions, but to a certain extent appears to be a result of them" (Weber, 1958). Moreover, the significance and controversy of this theory means that over a century since it was published, the debate continues on its validity and reliability. What must be noted however, is that there are as many supporters of the theory as there are opposition, and as such, its validity should not be taken lightly given the 'right context'. To elaborate, looking beyond the specifics of Weber's theory that Calvinism has led to the rise of

capitalism, and led to the distinctive differences between the economic well-being of the majority Protestant Northern Europe relative to the majority Catholic South, the focus should be instead on the culture, which Calvinism has created, and the effect this culture had on the attitudes of the Calvinists in their day-to-day lives—i.e., putting the well-being of the society before their own well-being, engaging in collaborative business dealings, spending wisely whilst also gathering wealth non-ostentatiously. When shifting the focus from Calvinism in specific, to culture in general, Weber's thesis becomes a valid framework for studying the impact of *culture* on economic well-being, in particular how culture can positively or negatively influence the behavior of individuals.

Literature review. Weber's thesis is the most influential framework to study the impact of religion on economic well-being. As such, most studies in the field of economics of religion are highly influenced by the work of Weber. With that said, studies in the field are generally divided into three broad categories: (1) studies which examine Weber's thesis (i.e., Zafirovski, 2016); (2) studies which test the validity of Weber's thesis (i.e., Kersting et al., 2020; Schilpzand and de Jong, 2021); and (3) studies which adopt Weber's thesis to test the relationship between religion and economic well-being (i.e., Barro and McCleary, 2003; Noland, 2005; Mgaloblishvili, 2018 etc.). The focus of this section will be *primarily* on the latter, presenting a summary and an analysis of the literature, which applies Weber's thesis to test the impact of religion on economic variables.

One of the most prominent empirical studies that investigates the impact of religion on economic well-being is that by Barro and McCleary (2003). The authors investigate the effect of church attendance & religious beliefs on economic growth. The authors find that Islam, Orthodox Christianity, Protestantism, and Hinduism are all negatively associated with income per capita growth relative to Catholicism. Another study is that by Guiso et al. (2003), who utilize the World Values Surveys to study the relationship between the “intensity of religious beliefs and economic attitudes” (Ibid, 2003). Regarding the theoretical basis of this study, the authors are influenced by the ideas of Karl Marx (1844) and Max Weber (1958), the former is famous for stating that, in so many words, “Religion is the opium of the people”, whilst the latter, as aforementioned, is famous for his views on how religion impacts economic well-being in the Protestant Ethic. Regarding the research findings, the authors find that “religious beliefs are associated with ‘good’ economic attitudes, where ‘good’ is defined as conducive to higher per capita income and growth” (Ibid, 2003). Alesina et al. (2003) investigate the influence of ethnic, linguistic, and religious fractionalization, i.e., dissolution, on the quality of economic growth and the quality of institutions and government policy (Ibid, 2003). Regarding the research findings, the authors find that ethnic and linguistic fractionalization, but not religious fractionalization, are important determining factors of long-term economic growth, as well as on the quality of government policies such as literacy rate, infant mortality et al., and on the quality of institutions measured by the levels of corruption, political freedom et al. (Ibid, 2003). Sala-i-Martin et al. (2004) examine the strength of 67 explanatory variables in cross-country economic growth regressions on a sample of 88 countries. Regarding the findings of the research, limiting the findings to those relevant to religion & religiosity, Islam, for example, the authors find that the Muslim population is positively associated with growth, whilst failing to find any relationship between intensity of belief, i.e., religiosity, and per capita growth.

Focusing on the impact of Islam on economic well-being, Noland (2005) investigates the relationship between religion and economic performance in cross-country and within-country regressions. The author attempts to test the hypothesis that “religious attitudes affect national economic performance”, as well attempting to nullify the hypothesis that “religious affiliation is uncorrelated to economic performance” (Ibid, 2005). Moreover, Noland attempts to empirically analyze the Weberian view that the “protestant reformation was critical to the rise of capitalism through its impact on belief systems” (Ibid, 2005). Regarding the research findings, the author rejects the null hypothesis with regards to religious affiliation and how its uncorrelated with performance, finding that religion matters (Ibid, 2005). However, the author posits that the “regressions do not yield a strong pattern of coefficients with respect to particular religions” (Ibid, 2005). In response to Noland's findings on the impact of Islam on economic growth, and how they contradict those of Barro and McCleary (2003) and others, Kuran (2018) argues that cross-country studies on whether Islam hinders economic growth are inconclusive because cross-country studies are unable to control for country-specific institutional effects. Regarding institutions, Karaçuka (2018) argues that Muslim countries are underdeveloped not due to Islam, but due to the countries inflexible political and legal institutions. Another study which attempts to study the relationship between Islam and economic well-being is that by Pryor (2007), where the author utilizes both cluster & regression analysis for a sample of 62 countries and 44 indicators to study the economic and social impact of Islam on developing countries. Regarding the research findings, the author finds that Islam has little influence on most economic or social performance indicators. To elaborate, he finds that “religion does not appear to be a useful explanatory variable, and the results suggest that the economic systems of developing nations (including Islamic nations) have a more significant impact on the totality of economic and social performance indicators than does Islam” (Ibid, 2007). Another study which focuses on Islam and Muslim countries is that by Jean-Phillipe Platteau (2008), who critically examines the thesis of Bernard Lewis (2002) on why Muslim countries are poorly developed, and specifically on how “the lack of separation between religion and politics creates particular difficulties on the way to modern economic growth in these lands” (Platteau, 2008). Regarding the findings, the author states that if one examines the literature on the causes of long-run growth across countries, one will come to the following conclusion “the null hypothesis that religious affiliation is uncorrelated with economic performances can frequently be rejected (i.e., religion matters), yet the regressions do not yield a robust pattern of coefficients with respect to particular religions, Islam included” (Ibid, 2008). However, the author also states that the evidence is not conclusive due to the presence of the endogeneity problem—i.e., “estimating the impact of culture on economic and other performances is extremely difficult because of the well-known endogeneity problem: rather than blocking development, a particular culture may evolve in a nasty direction as a result of a lack of growth.” The author adds that the endogeneity problem is difficult to overcome since “...it is practically impossible to find variables that influence culture without affecting growth performances in one way or another. Little can therefore be learned about causal effects from cross-sectional results.” Furthermore, the author continues his critique of the current studies examining the relationship between economics and religion by criticizing how current cross-country econometric studies lump together the various sects of religion under one category thereby “ignoring the multiple and subtle subdivisions and sects into which they have split over the course of their history” (Ibid, 2008). Moreover, the author states that just

because one is born Catholic, Muslim or otherwise, one might behave differently from the religious doctrine he follows, as well as the interpretation of the aforementioned doctrines could mean differing things from one individual to another. Because of the aforementioned limitations in the current literature and the quantitative approach they are adopting, the author states that “more reliable lessons can presumably be learned from a historical foray of the issue than from cross-country regressions” (Ibid, 2008). Regarding the research methodology, the author forgoes the use of a quantitative approach in the study of the relationship between economics and religion in favor of a qualitative historical approach, with particular reference to Islam in his paper. The reason the author chose to focus on Islam because he aims to find out whether the “prolonged period of low growth”, “poor democracy”, and the “rise of radical Islamist movement” can be attributable to the “intrinsic features of Islam” or otherwise, and to find out the origins of the aforementioned Islamist movements (Ibid, 2008). The approach by Platteau (2008) provides justification for utilizing a descriptive approach alongside a quantitative approach in studying the impact of religion on economic performance. The approach by the author raises the following questions: why should one focus only on quantitative data such as Muslim population? Why not explore qualitative data such as religious doctrine and identify from the literature the scripts or teachings, which are promoters and/or inhibitors of development? Why not explore historical data and texts to the time where Muslim countries and civilizations were prosperous and from there analyze what made them prosperous? And adversely, explore historical data and texts to the time where Muslim countries and civilizations have started to show signs of stagnation, demise etc. and analyze what led them to become so? In summary, Platteau provides a strong critique of the current literature examining the relationship between economics and religion and adopts a historical approach in his paper where he focuses on Islam, and argues since its early inception as a religion, Islam has been manipulated by political actors, calling it the “Instrumentalization of Islam” (Platteau, 2008; Aldashev and Platteau, 2014). This non-quantitative approach adopted provides a different perspective on how to investigate the relationship between economics and religion.

Hoffmann (2013) provides a survey of the experimental economics approach to the study of religion. The paper focuses on the results of current research and suggests that future research should center on how individual religious values, group membership, and the behavioral effects of religion can impact macroeconomic variables. The author does not conduct their own analysis, but unlike the other literature reviewed, recognizes that religion can affect individual behavior, which in turn can influence economic variables. Another study that provides a survey of literature is by Basedau et al. (2018), who provide a literature review on the empirical studies, which examine the effect of religion on socio-economic development. The significance of this paper is that it highlights the various studies, which examine the relationship between religion and various explanatory variables such as: (1) Economic Growth and Income; (2) Employment and the Labor Market; (3) Innovations and Economic Modernization; (4) Education; (5) Gender Inequality; (6) Income Inequality; (7) Democracy and Good Governance; (8) Social Capital. Regarding the limitations of the current literature, which examine the relationship between religion and economic well-being, the authors state that using population shares as a proxy indicator leads to inconclusive results due to the entanglement of religion and culture. Furthermore, the studies do not test to the relative strength of religious beliefs among countries, i.e., being labeled a Muslim country for example is insufficient for testing the influence of Islam on economic, social,

or political outcomes et al. Another methodological limitation pertains to the “limited comparability of religious concepts across countries and religious groups” (Ibid, 2018). In other words, the influence and interpretation of religion is not consistent across countries. The authors provide the following solution to this problem, stating that “it makes sense to look at the actual behavior of collective and individual religious actors in transitions from autocracy to democracy or protest against authoritarian regimes” (Ibid, 2018) if one is to measure the influence of religion on development. Regarding the findings of the research, the authors indicate that the studies “show no clear evidence on the influence of religion on economic growth, and some of the classical hypotheses are not robustly supported” (Ibid, 2018). One such hypothesis the authors claim does not stand, which is how Protestantism promotes growth. Furthermore, the authors reference the findings of Barro and McCleary (2003); Noland (2005); & Pryor (2007); and state that these results “do not provide proof beyond reasonable doubt” (Ibid, 2018). This is a position that is accepted as well by North (2005) who argues that testing the impact of religion on economic performance is inconclusive because one can nit-pick particular aspects of any religion, which are anti-growth. Regarding the research significance, it pertains to how it summarizes the literature, which examines the impact of religion on various explanatory variables. Furthermore, this paper reaffirms the position that the current framework for studying the impact of religion on development is highly flawed and requires more “rigorous methodological and theoretical studies and better availability and coverage of data” (Basedau et al., 2018).

Another study influenced by Weber’s thesis is that by Mgaloblishvili (2018), who studies the impact of religion on the economic disparity between Georgia and Estonia. The study utilizes a descriptive research methodology based on an analysis of the country’s historiography, contemporary development theories, and the findings of religious scholars (Ibid, 2018). The research findings suggest that the economic disparity between the two countries is due to Georgia’s majority Eastern Orthodox Christianity population, relative to Estonia’s majority non-religious population and minority protestant population. The research findings suggest that Eastern Orthodox Christianity hinders of good governance and the development of a free market economy (Ibid, 2018). This study makes the same methodological and conceptual mistakes as the other literature reviewed. To elaborate, the study does not attempt to address the endogeneity problem, does not attempt to compare the religions themselves and what they promote within the context of development, nor does the study differentiate between religion and religiosity.

It must be reiterated that there are many studies, which examine the relationship between religion and economic well-being, however, studies on the relationship between religion and socio-economic development are lacking. One study which attempts to study the relationship between religion and development is that by Essien (2021), who conducts an ethico-phenomenological evaluation on religion and development in Africa. The author posits that there is a lack of consensus on the nature of the relationship between religion and development, and this could be due to a lack of a theoretical core and insufficient definitions of religion and development.

In conclusion of the literature review, although a plethora of studies exist on the impact of religion, religiosity, religious affiliation etc. on economics, trust, attitudes, happiness, and others, very few studies *truly* study religion as a system of belief. A possible rationale for the lack of studies on religion in its true form is possibly due to the difficulty of quantifying, and subsequently empirically testing, religion relative to religiosity, religion population, or any other alternative ‘definitions’ of

religion, which are easier to quantify. This missassociation of religion with religiosity, religion population et al. leads to the endogeneity problem, which in turn could lead to false outcomes; the literature surveyed by this study suffers from this problem. The upcoming section will discuss the theoretical limitations of Weber's thesis, the widely adopted framework by most literature to study the relationship between economic and religion, as well as a further discussion of the limitations of current literature.

Limitations of Weber's thesis and existing literature. Weber's theory is not without its detractors, and his theory suffers from speculative causality as many scholars posit that Weber was simply developing his ideas and linking them to existing phenomenon. As such, simply drawing hypotheses whilst not relying on empirical testing and evidence, i.e., it has rarely been empirically tested with historical data (Cantoni, 2014), Weber's theory alone is insufficient for the study of the impact of religion on economic performance, and existing studies, which exclusively adopt this theoretical framework without addressing its limitations can be rightfully scrutinized.

Regarding some of the literature reviewed, and similar to Weber's thesis, they are attributing some of the phenomenon, i.e., poor economic growth, as a consequence of religion. To elaborate, most studies that examine the relationship between religion and economic well-being fail to distinguish between the religion itself and what it preaches, and that of the behavior of the religion constituents. These studies simply rely on an inductive approach that utilizes economic and social theories to explain why some nations, which follow a particular religion are less developed relative to others, and subsequently draw conclusions based on this categorization without delving into the religion itself. By forgoing a deductive approach, which delves into the religious scripts in order to identify whether the teachings and principals of a religion are pro or anti-development, the authors are, similar to Weber, linking the phenomenon to the outcomes. For example, predominant Muslim countries, which are well-endowed with natural resources such as the Gulf Cooperation Council countries are more developed than the Muslim countries without such endowment. Even though these countries follow the same religion, they have different levels of development. As such, it would be nonsensical to assume that Islam hinders development just by studying the economic well-being of relatively poor countries, as it would be nonsensical to assume that Islam promotes development simply by studying the economic well-being of oil-rich countries. A more accurate measure would be to study the religion itself and operationalize the concepts, which one would assume to be pro or anti-development.

An author who addresses the limitation of adopting an inductive approach is Pryor (2007), who states that "it runs the risk of attributing to Islamic doctrine particular results that are in fact due to causes that have little direct relationship with Islam" (Ibid, 2007). The authors states that a deductive approach could have been utilized, allowing him to dig deeply into the Islamic doctrines and developing models based on those doctrines, but he forgoes this approach stating that "it runs the risk that the institutions of Muslim countries and the behavior of its citizens may be only weakly related to the presumptive religious doctrine" (Pryor, 2007).

The argument by Pryor (2007) that the behavior of Muslims might not exactly reflect the what the religion itself preaches is shared by Crocco et al. (2009) and Megahed and Lack (2011); the former state that it is due to not truly understanding Islam, and associating Islamic teachings with that of the "actions of the faith's followers", whilst the latter discuss the on-going debate on

what can be attributed to Islam, and what can be attributed to variables such culture and social norms.

With that said, how can one *appropriately* and *objectively* study the impact of religion on development? This paper proposes a synthesized theoretical framework which utilizes both inductive and deductive approaches, based on theories, which are more holistic in nature, allowing for differentiating between the religion itself and the behavior of its constituents, whilst utilizing quantitative and descriptive methodologies to reduce religion association bias, as opined by North (2005) in an earlier section. The theories which make up the synthesized theoretical framework, and how they will be conceptualized, will be discussed in the upcoming section.

Methodology & design

There are broadly three types of research design: exploratory, descriptive, and causal (Sreejesh et al., 2014). Exploratory research is usually adopted where problems are not well defined, with questions that have not been studied in-depth. Moreover, it tends to be informal, unstructured, and highly ambiguous. Descriptive research can be either quantitative or qualitative and primarily involves three methods: observations, surveys, and case studies. Moreover, descriptive studies tend to be more structured than exploratory research, with a more defined problem, but less structured than causal research. Causal design is a research methodology that seeks to identify the cause-and-effect relationship between variables. Whilst it is impossible to prove causation (Ibid, 2013), this methodology is most appropriate when attempting to study the effect a change in one variable has on another (Erickson, 2017). A major difference between causal research and the other research designs is that the primary focus of causal research is the research hypotheses and relevant variables, i.e., Muslim countries are *underdeveloped* due to the *behavior* of the religion constituents, and not due to *religion*. On the other hand, exploratory and descriptive research focus more on the research questions rather than the research hypotheses.

Causal research design. This study attempts to develop a framework which facilitates for measuring the relationship between, and the impact of, religion on development, whilst including behavior as a new variable to differentiate between the religion and its constituents. To better understand the nature of the relationship between behavior, religion, and development, a causal research design must be adopted. According to Sreejesh et al. (2014), there are three types of causal relationships: symmetrical, reciprocal, and asymmetrical. Regarding behavior, religion, and development, the causal relationship is asymmetrical since a change in one variable, i.e., independent variable, is responsible for change in another variable, i.e., dependent variable. In addition, and within the context of this study, the relationship between religion and development is in the form of a disposition-behavior relationship, where the behavior of individuals, as influenced by religion, positively/negatively impact the development of nations. Causal research is the most appropriate research design for this study as it facilitates for better understanding the nature and the extent of the relationship between variables in poorly understood phenomena, i.e., religious affiliation and the contrasting economic fortunes of Northern & Southern Europe in the early modern period.

The synthesized theoretical framework. To address the limitations of the existing framework for studying the impact of religion on economic well-being, particularly how the current framework does not distinguish between religion, culture, and behavior, and to expand the analysis from economic well-being to a more

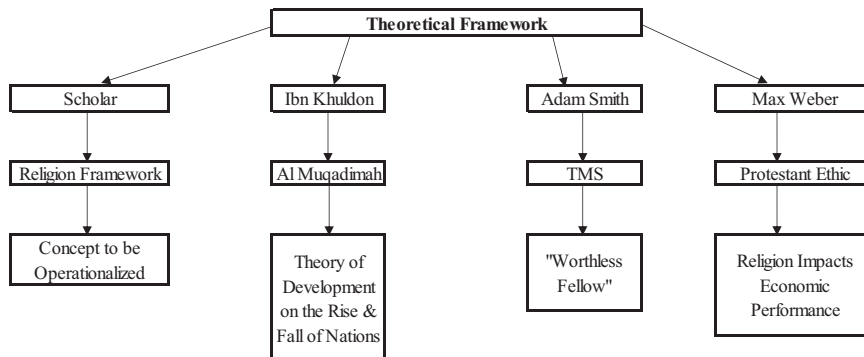


Fig. 1 Synthesized theoretical framework to study the influence of religion on development. The figure shows the different theories and concepts that form the synthesized theoretical framework to study the impact of religion on development.

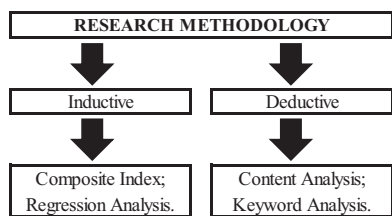


Fig. 2 A summary of the methodology of the theoretical framework. The figure shows a simplified visual illustration of the research methodology to study the impact of religion on development.

holistic measure of development, this paper proposes a new synthesized theoretical framework. The proposed framework is based on 4 theories, and they are as follows: Weber’s ‘Protestant Ethic’ (1958), Adam Smith’s ‘Theory of Moral Sentiments’ (1759), Ibn Khuldun’s ‘Theory of Development’ (2004), and a fourth theoretical framework which is contingent on the religion being studied. A visual representation of the synthesized theoretical framework is presented in Fig. 1.

The methodology of the synthesized framework. The purpose of the synthesized framework is to differentiate between the religion itself and the behavior of its followers to address the endogeneity problem. This is achieved by utilizing theories which facilitate the attempts of quantifying the religion itself as well as the behavior of its constituents. Regarding quantifying the religion itself, this involves selecting a religious framework and operationalizing its concepts to develop an index whose proxies are a reflection of the selected framework. Moreover, quantitative methods such as regression analysis can be utilized to test the relation between some of these proxies and measures of development such as the HDI. Such an inductive approach, despite providing some information on the relation between development and different variables, which can be found in the religious framework, does not provide us with the larger picture as to whether the religion itself promotes or hinders development as empirical methods such as composite indices and regression models can lead to false outcomes due to their simplification of reality and other known limitations. As such, the inductive methodology must be supplemented with a deductive approach, which analyzes the religion itself for any teachings or concepts, which promote or deter engaging in development hindering behavior. This can be achieved by utilizing *content* and *keyword analysis* of the religious text where the variables which have been identified by the inductive method as development hindering, i.e., corruption, knowledge creation, social dissention etc., are searched for within the text and the resulting religious text is analyzed to determine whether it encourages or opposes engaging in such behavior. A

summary of the methodology of the theoretical framework is presented in Fig. 2.

Conceptualizing the theories. The upcoming section will discuss in greater detail the theories which make up the theoretical framework. In the meantime, a summary of how these theories will be conceptualized will be presented. Regarding Weber’s theory, it facilitates for the study of how informal institutional factors such as culture and norms can impact development. Adam Smith’s theory operationalizes the concept of the ‘worthless fellow’ in the ‘Theory of Moral Sentiments’ (TMS) to provide a theoretical justification for developing a quantitative measure based on adherence to the ‘rules of the Deity’, the rules which lead to the happiness, or well-being, of mankind, and characterize individuals based on their behavior as either ‘men of honor’, or ‘worthless fellows’. Ibn Khuldun’s theory provides a more holistic framework for measuring the impact of various variables on development, including but not limited to economic, social, political, and cultural factors. The fourth framework is contingent upon the religion being studied. To provide an example, if one seeks to study the impact of Islam on development, one must conceptualize a theory based on Islamic teachings and principles. An example of such theory is that of Al Ghazaly’s (1937) ‘Maqasid of Shariah’ or the *purpose of Islamic jurisprudence*. This theory will be elaborated upon in the upcoming section, in short however, it posits that there are 5 elements which must be achieved if mankind is to achieve well-being or ‘Maslaha’, and to avoid harm or ‘Mafsada’. This theory allows one to develop a quantitative measure based on the 5 elements of this theory, by assigning proxies, which are reflective of these elements.

In summary, the purpose of the synthesized theoretical framework is to study the impact of religion on development, and to facilitate for differentiating between the religion itself and the behavior of its constituents. This is achieved by utilizing inductive and deductive methods such as composite indices and empirical models, as well as deductive methods such as descriptive explanations and content analysis of religious doctrine. The synthesized framework based on all 4 theories is presented in Fig. 3, and a conceptual framework utilizing both quantitative and descriptive methodologies and exhibiting how these theories can be utilized to study the impact of religion, Islam in this example, on development is presented in Fig. 4.

The theories which make up the synthesized theoretical framework

Maqasid of Shariah: what are they?. According to Ibn Ashur (1969), ‘Maqasid of Shariah’ refer to “the preservation of order, achievement of benefit and prevention of harm or corruption, establishment of equality among people, causing the law to be

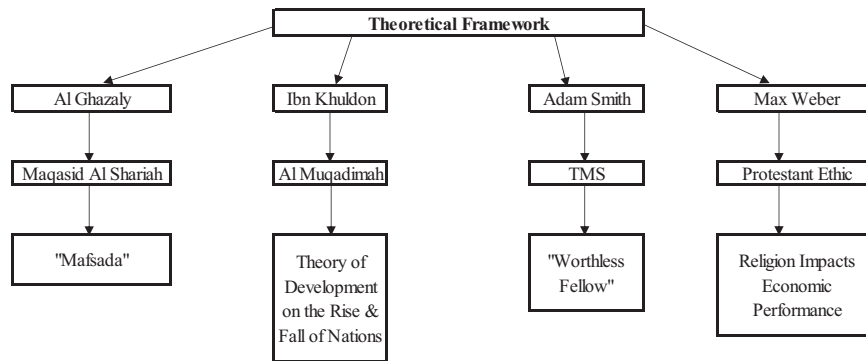


Fig. 3 A tree-map of the synthesized theoretical framework. The figure shows the different theories and concepts that form the synthesized theoretical framework to study the impact of Islam on development.

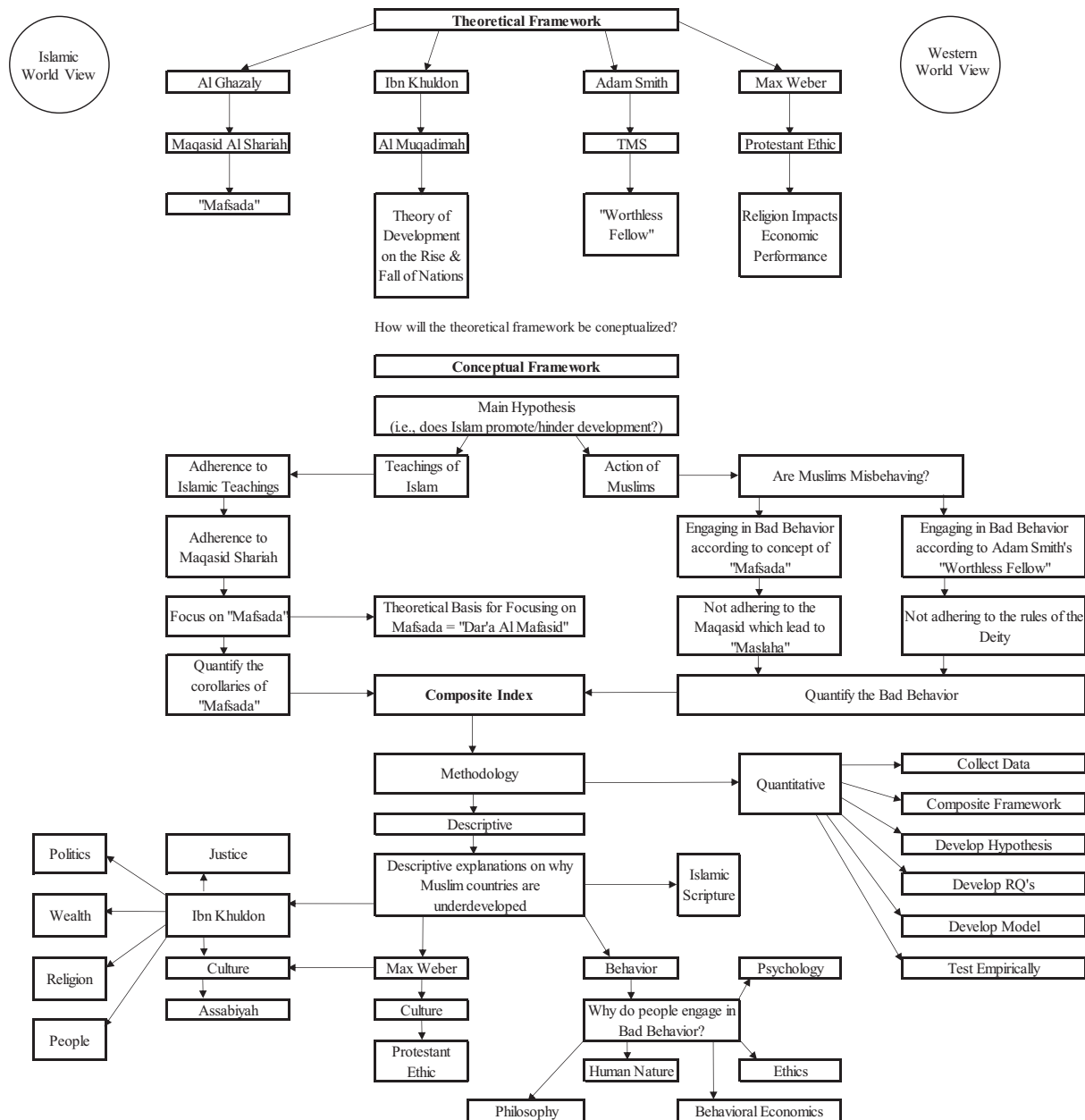


Fig. 4 Conceptual framework map. The figure shows how the theoretical framework will be conceptualized to study the impact of religion, Islam in this case, on development.

Table 1 Composite index proxies and their corresponding Maqasid of Shariah.

#	Proxy	Maqasid
1	Restricting economic freedoms	Hafth Al Mal (Wealth)
2	Monopolistic markets	Hafth Al Din (Religion); Hafth Al Mal (Wealth); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
3	Rentierism	Hafth Al Mal (Wealth); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
4	Unemployment	Hafth Al Mal (Wealth); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
5	Inflation	Hafth Al Mal (Wealth); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
6	Poor savings	Hafth Al Mal (Wealth); Hafth Al Nasl (Family)
7	Poor infrastructure	Hafth Al Mal (Wealth); Hafth Al Nasl (Family)
8	Money laundry	Hafth Al Din (Religion); Hafth Al Mal (Wealth)
9	Public sector corruption	Hafth Al Din (Religion); Hafth Al Mal (Wealth); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
10	Political instability	Hafth Al Din (Religion); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
11	Poor rule of law	Hafth Al Din (Religion); Hafth Al Mal (Wealth); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
12	Social dissension	Hafth Al Din (Religion); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
13	Poor Academic Influence	Hafth Al Din (Religion); Hafth Al Aql (Mind)
14	Food loss & waste	Hafth Al Din (Religion); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
15	Poor access to clean water	Hafth Al Din (Religion); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
16	Suicide rates	Hafth Al Din (Religion); Hafth Al Nasl (Family); Hafth Al Nafs (Self)
17	CO ₂ emissions	Hafth Al Din (Religion); Hafth Al Nasl (Family); Hafth Al Nafs (Self)

revered, obeyed and effective as well as enabling society to become powerful, respected and confident”.

Islamic scholar *Al Juwainy* was the first to classify the ‘Maqasid’ into: (1) Necessities or *Daruriyat*; (2) Needs or *Hajiyat*; (3) Luxuries/Complimentaries or *Tahsiniyat* (Kamali, 1999). This framework was further developed by his pupil, *Al Ghazaly*, who developed a model which focuses on the ‘Maslaha’ dimension of the ‘Maqasid’ and defined it as follows: “In its essential meaning (aslan) it [maslahah] is an expression for seeking something useful (manfa’ah) or removing something harmful (madarrah)” (Masud, 1977).

Regarding the ‘Daruriyyat’ or necessities, they are considered actions, behaviors, or ends which are essential for the well-being of mankind in this life and the hereafter. *Al Ghazaly* posits that by not abiding by these necessities leads to the destruction of mankind. The necessities mentioned by *Al Ghazaly* are the five ‘Maqasid of Shariah’, and they are ‘Hafth’ or protection of: 1) *Din* (Religion), 2) *Nafs* (Life), 3) *Aql* (Mind), 4) *Mal* (Wealth), & 5) *Nasl* (Family).

Conceptualizing the Maqasid of Shariah. The ‘Maqasid of Shariah’ provide a guide for Muslims to abide by to achieve ‘Maslaha’, i.e., public good, and avoid ‘Mafsada’, i.e., public harm. Based on the concept of “Dar’a Al Mafasid”, i.e., pushing harm is prioritized over achieving well-being assuming both are equal, the focus will be on preventing ‘Mafsada’, in particular the corollaries, actions, or behavior, which leads to societal harm. The concept of ‘Maf-sada’ can be utilized to quantify measures of bad behavior which lead to public harm, and this measure will also be a measure of Islamic adherence as the countries, which are most adherent to the Islamic concept of “Dar’a Al Mafasid”, will be ranked lower on the index, whilst the countries actively engaging in bad behavior which leads to public harm, ‘Mafsada’, will be higher on the list—which is also in line with Smith’s ‘worthless fellow’, which is a concept based on adherence to the rules of the deity which lead to the well-being or happiness of mankind. With that said, the composite index proxies will not only be based on the 5 Maqasid of Shariah and Adam Smith’s ‘worthless fellow’, but they must also be in line with theory and literature as culprits for poor development. Furthermore, the proxies selected must also be supported not only by academic literature but also by Islamic scripture, i.e., evidence from Quran and ‘hadeeth’, i.e., teachings and axioms of Prophet Muhammad (Peace Be Upon Him). Table 1 provides a list of the proxies to be utilized in the index whilst Table 2 provides evidence from Quran and hadeeth supporting the selection of the proxies.

Ibn Khuldon—‘Al Muqadimah’ (The Introduction). Ibn Khuldon’s major life work can be found in a book titled “The Book of Lessons”, or “Kitab Al Ibar”. Within this book exists an introductory chapter, ‘Al Muqadimah’ (Ibn Khuldon and Al Darwish, 2004), which presents a universal history of the world at the time, primarily focusing on why nations, or civilizations to be specific, rise and fall. In his discussion Ibn Khuldon presents a theory called the ‘theory of development’, which states that there are several internal and external forces which could lead to the rise and fall of civilizations. Ibn Khuldon posits that the presence of the internal and external forces which leads to the rise and fall of civilizations is a fact of life, and that societies must be dynamic in the sense that they need to be active in responding and preventing, or lessening the adverse effects, of such forces on the well-being, or survival, of the society. Ibn Khuldon’s theory is so holistic and multi-disciplinary that it discusses how factors such as religion, culture, justice, politics, wealth, and behavior, among others, can impact a nations level of development.

Conceptualizing Ibn Khuldon’s theory of development. Ibn Khuldon’s views in ‘Al Muqadimah’, i.e., ‘The Introduction’, will be utilized to provide a descriptive explanation as to why some countries are underdeveloped relative to others, as well as provide a quantitative influence for developing possible empirical models, as well as for the proxies which make up the composite index, which can be used as a measure of the development hindering behavior of a country’s constituents, thereby facilitating for differentiating between what the religion itself preaches, and the behavior of the religion constituents. To elaborate, Ibn Khuldon’s theory of development posits that there are multi-dimensional internal and external factors which lead to the rise and fall of civilizations. The synthesized theoretical framework utilizes the core principle of this theory, the multi-dimensional factors, to construct models which are interdisciplinary in nature, as well facilitating the proxy selection of the index. In regards to the descriptive explanation on why some countries are poorly developed, the interdisciplinarity of Ibn Khuldon’s model can influence the hypotheses formulation process, as well as the utilization and exploration of several theories and concepts in various fields to provide possible multidisciplinary explanations as to why people engage in bad behavior, which could lead to the fall of nations—i.e., fields such as the philosophy of human nature, psychology, ethics, behavioral economics etc.

Table 2 Evidence from Quran and Hadeeth to support proxy selection.

Proxy	Script (Arabic)	Script (English)	Source
1	قال تعالى: (بَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبُاطِلِ) [النساء: 29] عن رسول الله ﷺ أنه قال: من أخذ شبرًا من الأرض ظلمًا، طوّفه إلى سبع أراضي عن رسول الله ﷺ أنه قال: لا يدخل الجنة صاحب مكس	O you who have believed, do not consume one another's wealth unjustly. Avoid taking the land unjustly, for the Prophet said, 'Whoever usurps even one span of the land of somebody, his neck will be encircled with it down the seven earths. One who wrongfully takes an extra tax (sahib maks) will not enter Paradise.	Saheeh International (2011) Al Bukhari; "Sahih Al Bukhari" (English Translation: Vol. 3, Book 43, Hadith 633) Abu Dawood; (n.d.) "Sunan Abi Dawud" (English Translation: Book 19, Hadith 2931)
2	عن رسول الله ﷺ أنه قال: لا يحتكر إلا خاطئ عن رسول الله ﷺ أنه قال: التاجر الصدوق يحشر يوم القيامة مع الصديقين والشهداء	No one hoards but the sinner. The truthful, trustworthy merchant is with the Prophets, the truthful, and the martyrs.	Muslim; (n.d.) "Sahih Muslim" (English Translation: Book 10, Hadith 3911) Al-Tirmidhi; (n.d.) "Jami' at- Tirmidhi" (English Translation: Vol. 1, Book 12, Hadith 1209)
3	[قال تعالى: (وَجَعَلْنَاكُمْ أُمَّةً وَسَطًا) [البقرة: 143]	And thus We have made you a median [i.e., just] community.	Saheeh International (2011)
4	عن رسول الله ﷺ أنه قال: كلّمك راع وكلّمك مسؤول عن رعيته: الإمام راع ومسؤول عن رعيته، والرجل راع في أهله وهو مسؤول عن رعيته، والمرأة راعية في بيت زوجها ومسؤولة عن رعيته، والخادم راع في مال سيّده ومسؤول عن رعيته - قال: وحسبت أن قد قال: والرجل راع في مال أبيه ومسؤول عن رعيته - وكلّمك راع ومسؤول عن رعيته عن رسول الله ﷺ أنه قال: لأن يأخذ أحدكم حبله فيأتي بحزمة من الحطب على ظهره، فيبيعها، فيكف بها وجهه; خير له من سؤال الناس: أعطوه، أو منعه	Each of you is a shepherd and each of you is responsible for his flock. The amir (ruler) who is over the people is a shepherd and is responsible for his flock; a man is a shepherd in charge of the inhabitants of his household and he is responsible for his flock; a woman is a shepherdess in charge of her husband's house and children and she is responsible for them; and a man's slave is a shepherd in charge of his master's property and he is responsible for it. So each of you is a shepherd and each of you is responsible for his flock. It is better for anyone of you to take a rope (and cut) and bring a bundle of wood (from the forest) over his back and sell it and Allah will save his face (from the Hell-Fire) because of that, rather than to ask the people who may give him or not.	Abu Dawood (n.d.); "Sunan Abi Dawud" (English Translation: Book 19, Hadith 2922) Al Bukhari; (n.d.) "Sahih Al Bukhari" (English Translation: Vol. 2, Book 24, Hadith 549)
5	عن رسول الله ﷺ أنه قال: ... استفاضة المال حتى يُعطي الرجل مائة دينار فيبطل ساخطا	...The increase of wealth to such an extent that even if one is given one hundred Dinars, he will not be satisfied.	Al Bukhari; (n.d.) "Sahih Al Bukhari" (English Translation: Vol. 4, Book 53, Hadith 401).
6	قال تعالى: (وَلَا تَجْعَلْ يَدَكَ مَغْلُولَةً إِلَىٰ عُنُقِكَ وَلَا تَبْسُطْهَا كُلَّ الْبَسْطِ فَتَقْعَدَ مَلُومًا مَحْشُورًا) [الاسراء: 29] قال تعالى: (إِنَّ الْمُبْتَدِينَ كَانُوا إِخْوَانَ الشَّيَاطِينِ وَكَانَ [الشَّيْطَانُ لِرَبِّهِ كَفُورًا) [الاسراء: 27] قال تعالى: (والذين إذا أنفقوا لم يسرفوا ولم يقتروا [وكان بين ذلك قوامًا) [الفرقان: 67] عن رسول الله ﷺ أنه قال: "... ما هذا السرف؟" .. فَقَالَ "أَفِي الْوُضُوءِ إِسْرَافٌ.. قَالَ " تَعْمُ وَإِنْ كُنْتَ عَلَىٰ نَهْرٍ جَارٍ	And do not make your hand [as] chained to your neck or extend it completely and [thereby] become blamed and insolvent. Indeed, the wasteful are brothers of the devils, and ever has Satan been to his Lord ungrateful. And [they are] those who, when they spend, do so not excessively or sparingly but are ever, between that, [justly] moderate. What is this extravagance?' He said: 'Can there be any extravagance in ablution?' He said: 'Yes, even if you are on the bank of a flowing river.	Saheeh International (2011) Saheeh International (2011) Saheeh International (2011) Ibn Majah; (n.d.) "Sunan Ibn Majah" (English Translation: Vol. 1, Book 1, Hadith 425)
7	قال تعالى: (هُوَ أَنشَأَكُم مِّنَ الْأَرْضِ وَاسْتَعْمَرَكُمْ فِيهَا) [هود: 61]	He has produced you from the earth and settled you in it.	Saheeh International (2011)
8	قال تعالى: (لا تأكلوا أموالكم بينكم بالباطل وتدلوا بها إلى الحكام لتأكلوا فريقًا من أموال الناس بالإثم وأنتم تعلمون) [البقرة: 188]	And do not consume one another's wealth unjustly or send it [in bribery] to the rulers in order that [they might aid] you [to] consume a portion of the wealth of the people in sin, while you know [it is unlawful].	Saheeh International (2011)
9	[قال تعالى: (وَاللَّهُ لَا يُحِبُّ الْمُفْسِدِينَ) [المائدة: 64] قال تعالى: (وَإِذَا تَوَلَّى سَعَىٰ فِي الْأَرْضِ لِيُفْسِدَ فِيهَا وَأَهْلِكَ الْحَرْثَ وَالنَّسْلَ وَاللَّهُ لَا يُحِبُّ الْفَاسِدَ) [البقرة: 205] عن النبي ﷺ قال: مَنْ شَفَعَ لِأَخِيهِ شَفَاعَةً، فَأَهْدَىٰ لَهُ هَدِيَّةً، فَقَبِلَهَا، فَقَدْ أَتَىٰ تَابًا عَظِيمًا مِنْ أَبْوَابِ الرَّبِّ عَنْ عَبْدِ اللَّهِ بْنِ عَمْرٍو رَضِيَ اللَّهُ عَنْهُمَا قَالَ: لَعَنَ رَسُولُ اللَّهِ ﷺ الرَّاشِيَّ وَالْمُرْتَشِيَّ	... and Allah does not like corrupters. And when he goes away, he strives throughout the land to cause corruption therein and destroy crops and animals. And Allah does not like corruption. If anyone intercedes for, someone and that one gives him for it a present which he accepts, he has been guilty of a serious type-of usury. Allah's Messenger (ﷺ) cursed the one who bribes and the one who takes bribes.	Saheeh International (2011) Saheeh International (2011) Imam at-Tabrizi; (n.d.) "Mishkat al-Masabih" (Book 18, Hadith 93)
10	قال تعالى: (بَا أَيُّهَا الَّذِينَ آمَنُوا أَطِيعُوا اللَّهَ وَأَطِيعُوا الرَّسُولَ وَأُولِي الْأَمْرِ مِنْكُمْ) [النساء: 59]	O you who have believed, obey Allah and obey the Messenger and those in authority among you.	Ibn Hajar al-Asqalani; (n.d.) "Bulugh al-Maram" (English Translation: Book 7, Hadith 846) Saheeh International (2011)

Table 2 (continued)

Proxy	Script (Arabic)	Script (English)	Source
	عن رسول الله ﷺ أنه قال: من أطاعني فقد أطاع الله، ومن يعصني فقد عصى الله، ومن يطع الأمير فقد أطاعني، ومن يعص الأمير فقد عصاني	Whoso obeys me obeys God, and whoso disobeys me disobeys God. Whoso obeys the commander (appointed by me) obeys me, and whoso disobeys the commander disobeys me. The same tradition transmitted by different persons omits the portion: And whose disobeys the commander disobeys me.	Muslim; (n.d.) "Sahih Muslim" (English Translation: Book 20, Hadith 4518)
11	[قال تعالى: (إِنَّ اللَّهَ يُحِبُّ الْمُقْسِطِينَ) [الممتحنة: 8] قال تعالى: (إِنَّ اللَّهَ يَأْمُرُ بِالْعَدْلِ وَالْإِحْسَانِ وَإِيتَاءِ ذِي الْقُرْبَى وَيَنْهَى عَنِ الْفَحْشَاءِ وَالْمُنْكَرِ وَالْبَغْيِ يَعِظُكُمْ لَعَلَّكُمْ تَذَكَّرُونَ) [سورة النحل: 90] عن رسول الله ﷺ أنه قال: المقسطون علي منابر من نور يوم القيامة الذين يعدلون في حكمهم وأهليهم وما ولوا	Allah loves those who act justly. Indeed, Allah orders justice and good conduct and giving [help] to relatives and forbids immorality and bad conduct and oppression. He admonishes you that perhaps you will be reminded. Those who act justly will be with God on pulpits of light at the right hand of the Compassionate One, and both His hands are right. They are those who are just in their jurisdiction, towards their people and what is under their charge.	Saheeh International (2011) Saheeh International (2011) Imam at-Tabrizi; (n.d.) "Mishkat al-Masabih" (Book 18, Hadith 30)
12	عن رسول الله ﷺ أنه قال: مثل القائم على حدود الله والواقع فيها، كمثل قوم استهموا على سفينة فأصاب بعضهم أعلاها وبعضهم أسفلها، فكان الذين أسفلها إذا استسقوا من الماء مروا على من فوقهم فقالوا لو خرفنا في نصيبنا خرقا، ولم نؤذ من فوقنا، فإن يتركوهم وما أرادوا هلكوا جميعا، وإن أخذوا على أيديهم نجوا وجميعا	The Prophet (ﷺ) said, "The likeness of the man who observes the limits prescribed by Allah and that of the man who transgresses them is like the people who get on board a ship after casting lots. Some of them are in its lower deck and some of them in its upper (deck). Those who are in its lower (deck), when they require water, go to the occupants of the upper deck, and say to them: 'If we make a hole in the bottom of the ship, we shall not harm you.' If they (the occupants of the upper deck) leave them to carry out their design they all will be drowned. But if they do not let them go ahead (with their plan), all of them will remain safe".	An-Nawawi; (n.d.) "Riyad as-Salihin" (Hadith 187)
	عن رسول الله ﷺ أنه قال: ما زال جبريل يوصيني بالجار حتى ظننت أنه سيورثه	Gabriel impressed upon me (the kind treatment) towards the neighbor (so much) that I thought as if he would soon confer upon him the (right) of inheritance.	Muslim; (n.d.) "Sahih Muslim" (English Translation: Book 32, Hadith 6356)
	عن رسول الله ﷺ أنه قال: ما آمن بي من بات شبعان وجاره جائع إلى جنبه وهو يعلم به	The one who sleeps satiated and knows that his neighbor is hungry has not believed in me [completely/perfectly].	Al Tabarani (1999); "Al Mu'jamul Kabir" (Hadith 751)
13	قال تعالى: (هَلْ يَسْتَوِي الَّذِينَ يَعْلَمُونَ وَالَّذِينَ لَا يَعْلَمُونَ) [الزمر: 9] قال تعالى: (رَفَعَ اللَّهُ الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ) [المجادلة: 11] عن رسول الله ﷺ أنه قال: ومن سلك طريقا يلتمس فيه علما، سهل الله له به طريقا إلى الجنة	Are those who know equal to those who do not know? Allah will raise those who have believed among you and those who were given knowledge, by degrees. The Messenger of Allah (ﷺ) said, "Allah makes the way to Jannah easy for him who treads the path in search of knowledge."	Saheeh International (2011) Saheeh International (2011) An-Nawawi; (n.d.) "Riyad as-Salihin" (Book 12, Hadith 6)
14	عن رسول الله ﷺ أنه قال: طَلَبُ الْعِلْمِ فَرِيضَةٌ عَلَى كُلِّ مُسْلِمٍ عن رسول الله ﷺ أنه قال: كلوا واشربوا والبسوا وتصدقوا، من غير مخيلة ولا سرف	The search for knowledge is an obligation laid on every Muslim. The Messenger of Allah (ﷺ) said: "Eat and drink, give charity and wear clothes, as long as that does not involve any extravagance or vanity".	Imam at-Tabrizi; (n.d.) "Mishkat al-Masabih" (Book 2, Hadith 20) Ibn Majah; (n.d.) "Sunan Ibn Majah" (English Translation: Vol. 4, Book 32, Hadith 3605) Saheeh International (2011)
	قال تعالى: (كُلُوا وَاشْرَبُوا وَلَا تُسْرِفُوا إِنَّهُ لَا يُحِبُّ الْمُسْرِفِينَ) [الأعراف: 31]	O children of Adam, take your adornment [i.e., wear your clothing] at every masjid, ¹ and eat and drink, but be not excessive. Indeed, He likes not those who commit excess.	
15	عن رسول الله ﷺ أنه قال: بَيَّتَا رَجُلٌ يَطْرُقُ، اسْتَدَّ عَلَيْهِ الْعَطَشُ فَوَجَدَ بِنَاءً فَنَزَلَ فِيهَا فَشَرِبَ، ثُمَّ خَرَجَ، فَإِذَا كَلْبٌ يَلْهَثُ يَأْكُلُ التُّرَى مِنَ الْعَطَشِ، فَقَالَ الرَّجُلُ لَقَدْ بَلَغَ بِهَذَا الْكَلْبِ مِنَ الْعَطَشِ مِثْلَ الَّذِي كَانَ بَلَغَ مِنِّي، فَنَزَلَ الْبَيْتَ، فَمَلَأَ خُفَّهُ مَاءً، فَشَقَّى الْكَلْبَ، فَشَكَرَ اللَّهُ لَهُ، فَغَفَرَ لَهُ. "قَالُوا يَا رَسُولَ اللَّهِ وَإِن لَنَا فِي الْبَيْهَانِ لِأَجْرًا". فَقَالَ: "فِي كُلِّ ذَاتٍ كَيْدٌ رَطْبِيَةٌ أَجْرٌ"	A man felt very thirsty while he was on the way, there he came across a well. He went down the well, quenched his thirst and came out. Meanwhile he saw a dog panting and licking mud because of excessive thirst. He said to himself, "This dog is suffering from thirst as I did." So, he went down the well again and filled his shoe with water and watered it. Allah thanked him for that deed and forgave him. The people said, "O Allah's Apostle! Is there a reward for us in serving the animals?" He replied: "Yes, there is a reward for serving any animate (living being).	Al Bukhari; (n.d.) "Sahih Al Bukhari" (English Translation: Vol. 3, Book 43, Hadith 646)
	قال تعالى: (وجعلنا من الماء كل شيء حي) [سورة الإنبياء: 30]	... and made from water every living thing.	Saheeh International (2011)
16	قال تعالى: (وَلَا تَقْتُلُوا أَنْفُسَكُمْ إِنَّ اللَّهَ كَانَ بِكُمْ رَحِيمًا) [النساء: 29]	And do not kill yourselves [or one another]. Indeed, Allah is to you ever Merciful.	Saheeh International (2011)

Table 2 (continued)

Proxy	Script (Arabic)	Script (English)	Source
	عن رسول الله ﷺ أنه قال: لا يتمنين أحدكم الموت من ضر أصابه فإن كان لابد فاعلماً فليقل: اللهم أحيني ما كانت الحياة خيراً لي وتوفني إذا كانت الوفاة خيراً لي	None of you must wish for death because he is afflicted by evil circumstances, but if he cannot help doing so he should say, 'O God, give me life as long as life is better for me, and take me when death is better for me'.	Imam at-Tabrizi; (n.d.) "Mishkat al-Masabih" (Book 5, Hadith 77)
	قال رسول الله ﷺ: من قتل نفسه بحديدة فحديدته في يده يتوجأ بها في بطنه في نار جهنم خالداً مخلداً فيها أبداً ومن قتل نفسه بسهم فسمه في يده يتحساه في نار جهنم خالداً مخلداً فيها أبداً ومن تردى من جبل فقتل نفسه فهو منترد في نار جهنم خالداً مخلداً فيها أبداً	He who killed himself with steel (weapon) would be the eternal denizen of the Fire of Hell and he would have that weapon in his hand and would be thrusting that in his stomach for ever and ever, he who drank poison and killed himself would sip that in the Fire of Hell where he is doomed for ever and ever; and he who killed himself by falling from (the top of) a mountain would constantly fall in the Fire of Hell and would live there for ever and ever.	Muslim; (n.d.) "Sahih Muslim" (English Translation: Book 1, Hadith 199)
	عن رسول الله ﷺ أنه قال: كان ممن كان قبلكم رجل به جرح فجزع، فأخذ سكيناً فحز بها يده، فما رقا الدم حتى مات، قال الله تعالى: بادرني عبدي بنفسه حرمت عليه الجنة	... among those who lived before their time there was a man who had a wound and had so little patience to bear it that he took a knife with which he cut off his hand, but the blood did not cease to flow till he died. God most high said, "My servant has tried to outstrip me in taking his life, so I have excluded him from paradise."	Imam at-Tabrizi; (n.d.) "Mishkat al-Masabih" (Book 16, Hadith 9)
17	عن رسول الله ﷺ أنه قال: إذا قامت القيامة على أحدكم وفي يده فسيلة فليغرسها	If the Final Hour comes while you have a shoot of a plant in your hands and it is possible to plant it before the Hour comes, you should plant it.	Al Bukhari; (n.d.) "Al Adab Al Mufraad" (English Translation: Book 27, Hadith 479)
	عن رسول الله ﷺ أنه قال: ما من مسلم يغرس غرساً أو يزرع زرعاً فيأكل منه طير أو إنسان أو بهيمة إلا كان له به صدقة	There is none amongst the Muslims who plants a tree or sows seeds, and then a bird, or a person or an animal eats from it, but is regarded as a charitable gift for him	Al Bukhari; (n.d.) "Sahih Al Bukhari" (English Translation: Vol. 3, Book 39, Hadith 513)

Adam Smith—the theory of moral sentiments. Adam Smith's 'Theory of Moral Sentiment' is our sense of right and wrong, which Smith states develops overtime as people interact with one another and discover what is socially acceptable and what is not. Furthermore, Smith states that there is a natural desire to be "socially accepted"—i.e., we want to be seen by oneself, and by others, as morally accountable beings.

It can be argued that Adam Smith's greatest contribution in the Theory of Moral Sentiments is the concept of the "Impartial Spectator". According to Smith, the impartial spectator is "a force, a faculty", "the man within the breast" of "every reasonable man," a "disinterested bystander," the "real or imaginary man," "the conscience, or an abstract internal mechanism capable of judging actions, thoughts and passions" "impartially" "and thereby curbing the excesses of individual egoism and give it" "the proper tone and temper of moderation." (Adam Smith's TMS, as cited by Askari and Mirakhor, 2019).

Moreover, Smith states that the "Impartial Spectator embodies the norms and morals of society, he posits that moral rules emerge from the operation of our natural propensities and normal social experiences as analyzed by the model of the impartial spectator" (Berry et al., 2013). Additionally, Smith argues that these rules explicitly commend that people engage in behavior, which maximizes happiness as long as it does not harm others. Smith also posits that people should follow the rules irrespective of calculations of their general utility. Lastly, Smith states that these everyday rules, which are formed in the process of our social interactions, driven by the influence of the Impartial Spectator, are regarded as the laws of the deity. To elaborate, these moral rules of conduct which are a product of the social interactions of humans with one another, given the influence of the impartial spectator, are the rules of God himself in the sense that, according to Adam Smith, God has created us within a system which promotes the happiness of mankind, and the perfection of the world, and for those who go against this divine

purpose, the happiness of mankind, given that it does not lead to the harm of others, are in some way the enemies of God.

In summary, Adam Smith states that there are general rules and guidelines, which people must follow. These rules of morality are the commands and laws of God. The reason for saying that is because Smith posits that God's creation is designed to promote happiness, and by following these rules, which are formed from the social mechanisms encapsulated in the impartial spectator, we are following the scheme of God, and by not obeying them, we are in some measure "the enemies of God". (TMS III, 5.7: 166; as cited by Berry et al., 2013). Last but not least, Adam Smith states that those who follow these rule and guidelines are deemed men of honor, whilst those who do not follow those rules are deemed worthless fellows.

Conceptualizing Adam Smith's TMS. Smith's TMS is utilized in the theoretical framework because it can provide explanations as to why some countries are underdeveloped within the context of behavior, particularly in connection to the adherence to the 'rules of the Deity'. To elaborate, Adam Smith's TMS introduces the concept of the 'worthless fellow', the man who does not adhere to the rules of the Deity, the rules which are influenced by our interaction with other members of society in the presence of the impartial spectator, and whose purpose is to achieve the well-being or happiness of mankind.

In summary, Adam Smith's simple categorization of man as "a man of honor" or "a worthless fellow" in TMS, can facilitate the proxy selection process by providing theoretical justification for measuring the development hindering behavior of nations, i.e., the index can measure how 'honorable' or 'worthless' these countries are if they were to be judged as a man. Moreover, the index allows one to ask questions such as: Do these countries and their various institutions act in the self-interest of themselves only, or do they act in the self-interest of others as well? Do they

act within the ‘general rules of conduct, ‘sense of duty’, ‘divine commands’, which the very existence of human society depends on? Or do they act with their own self-interest in mind? Is their ‘sense of right and wrong’, their ‘Moral Sentiment’, dead? Or is it prospering? This is what the composite index could tell us, and how it relates to Adam Smith’s views in TMS.

Conceptual framework discussion

Current conceptual models vs. the study’s conceptual model. Current conceptual models attempting to study the relationship between religion and economics are simpler and more straightforward relative to the conceptual model this study is attempting to develop. For example, current models utilize an inductive methodology to study the impact religion has on economic well-being, where the variable for religion is not a true representation of religion, but a measure of population. On the other hand, the variable for religion in this study’s conceptual model is a better representation of religion than population, as it is born from the operationalization of religious doctrine. In addition, current models have a narrow focus on economic well-being, where the variable for economic well-being is interchangeable with economic development or growth. On the other hand, this study’s model extends the response variable to better reflect modern ideologies as to what constitutes societal well-being, i.e., the shift from economic growth to socio-economic development. Lastly, the study’s conceptual model adds a new variable to the mix, i.e., behavior, in response to the endogeneity problem.

Discussion

One might ask why this study relies on theories, concepts, and ideas of people who lived in a world unrecognizable to the world we know today. A world where values, morals, and what is deemed ethical or otherwise might be different to our world. In addition, one might argue that the ideas of scholars of the past might not hold today, especially with advances in research methods and the development of human capital and intellect where knowledge is being created at a pace faster than ever before. With that said, just because an idea was born from philosophers, scientists, economists etc. who came from a different time, it should not discredit its value or contribution to the academic community. Moreover, whereas the world is dynamic and highly evolving, some ideas are constant, and do not change with time or space. As such, the ideas of Adam Smith in TMS on how men can either be honorable or worthless fellows should not be discredited just because they came from a different time. Nor the numerous ideas of Ibn Khuldon, many of which stood the test of time quite well, i.e., division of labor and worker specialization etc. In addition, the ideas of Weber in the Protestant Ethic on how religion, culture, and social cohesion as a whole can serve as a catalyst for development have stood the test of time as well. In short, the ideas of Smith, Ibn Khuldon, Weber, and many scholars of the past should not be discredited simply because they came from a different time. On the contrary, they should serve as a point of departure when developing theoretical and conceptual models as long as the ideas themselves are valid, reliable, and testable using modern scientific methods.

Research Summary. This paper does not adopt the theories as they are, but rather builds on their foundations to develop independent ideas and hypotheses. To elaborate, this research seeks to build on Weber’s views in the ‘Protestant Ethic’ that social cohesion and cultural traits, and not particularly Protestantism, can have a positive impact on development. Adam Smith’s ideas in TMS that one must be “benevolent”, “prudent”, “a man of honor” and not a “worthless fellow” can be utilized to

construct an index, which measures the behavior of the religion constituents in several economic, social, and political indicators et al. This research seeks to build on those foundations by developing an index, which measures how “honorable”, or in this case, how “worthless” nations are. This can be measured by identifying from literature the elements of development hindering bad behavior. Is it corruption? Bribery? Greed? Political Instability? High Environmental footprint? And once these elements are identified, the index will be constructed, representing the actions an honorable man would not engage in, while a “worthless fellow” would. Ibn Khuldon’s theory of development provides a descriptive and quantitative basis for measuring the impact of several factors, including religion, on development. It provides theoretical justification for the variable selection for the index, as well as the empirical model, if one chooses to conduct a regression study. Lastly, the fourth theory to be utilized, which is contingent on the religion being studied, allows one to operationalize the concepts of the religion which are pro or anti-development, through quantifying these measures to differentiate between the concepts of the religion itself, and the behavior of the religion constituents.

Research gaps, contribution, & implications. Many authors have questioned the existence of a relationship between economics and religion. This criticism stems from a poor theoretical basis for measuring the relationship between these variables, and how current frameworks do not facilitate for differentiating between the religion itself and the behavior of its constituents, i.e., the endogeneity problem. Moreover, most studies examining the relationship between these variables adopt an inductive approach which is driven by data and empirical testing rather than focusing on religious doctrine, i.e., a deductive approach. In addition, these studies tend to have a narrow economic scope rather than a more holistic development scope. This antiquated economic focus must be addressed as literature and theory have shown economic well-being is not the all-be-all measure of societal well-being. With that said, and in response to the forestated research gaps, i.e., poor theoretical basis, methodological shortcomings, the inability to differentiate between the religion and its constituents, and the lack of studies with a more holistic development focus, this study introduces a theoretical and conceptual framework, which facilitates for the study of the impact of religion on development, whilst introducing ‘behavior’ as a new variable to the equation.

Regarding the research implications, this paper hopes to revitalize interest on how non-market factors such as religion can impact economic well-being, development etc., and how behavior is a forgotten and yet highly important variable that needs to be included in the conceptual models of studies in the field of economics of religion to avoid making inaccurate assumptions about religion. This is an important matter as failing to address these, possibly, inaccurate assumptions could lead to prejudice towards the religion adherents.

Conclusion & future research

This paper adopts an ambitious and heterodox approach in studying the impact of religion on socio-economic development in the presence of the endogeneity problem. It does so by attempting to bridge the gap between religion and behavior within the context of development, whilst arguing that some nations are more/less developed than others not specifically due to religion, but, possibly, due to the behavior of the religion constituents. This is not to say that religion cannot impact the development of nations, but the introduction of behavior as a new variable provides an alternative hypothesis to current literature in the field of economics of religion. Moreover,

introducing behavior as a new variable is important because it exposes the frailties of previous theoretical and methodological approaches, which did not consider the fact that country constituents are not necessarily behaving in accordance with their religious affiliation. As such, it is not simply enough to adopt an inductive approach based on data and empirical methods, but also utilize a deductive approach, which seeks to examine religious text. In short, the relationship between behavior, religion, and development is poorly understood, lacking in theoretical and conceptual basis, and requires further exploration.

In closing, this research might not be groundbreaking in its current form, but it hopes to pave the way for future research that can adopt different perspectives, theories, and methodologies to better understand why some nations are more developed than others, how does religion impact development, and what role does behavior play in all of this. To quote one of the kind peer reviewers of this manuscript “It is valuable to seek new ways to avoid a monotonous examination of the relationship between religion and the economy”, and this is what this research is attempting to achieve.

Data availability

Data sharing is not applicable to this research as no data was generated or analyzed.

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Competing interests

The author declares no competing interests.

Ethical approval

This article does not contain any studies with human participants performed by any of the authors.

Informed consent

No consent is required for this study since no human participants are involved.

Additional information

Correspondence and requests for materials should be addressed to Mohammad Tariq Al Fozaie.

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