

# Religion-Corruption Nexus in Ghana

## Micro Level Evidence

Emmanuel Carsamer • Anthony Abbam

**Abstract** The controversy surrounding the impact of religion and religiosity on the growth of corruption is yet to be settled. The effects of prosperity gospel and growth of African Pentecostalism organizations on the prevalence and transmission of corruption have witnessed resurgence in the economics of religions literature especially after the proliferation of individual churches in Africa. Using micro level data through survey and application of structural equation model, this study investigates the nexus between religiosity and prevalence of corruption in Ghana. The study reveals though that the two concepts are positively related it is insignificant. It also showed that socio economic status such as income directly influence corruption and trust of person positively promote prevalence of corruption. The policy implications are that religious leaders should take ethics preaching seriously. Again, there must be efforts to address public sector corruptions since it deepens poverty and its effects on society.

**Keywords** Corruption - Structural Equation model - Religion - Ghana

**JEL Classification** Z12 - P48

### Introduction

Globally, corruption is recognized to impede economic development and prosperity, hampers international trade and investment, erodes the social order, peace, and stability (Transparency International 2010; Laszlo & Alastair, 2000; Mauro 1995; Kaufmann, Kraay, & Mastruzzi, 2003). World Bank estimates that every year, between USD \$20 and \$40 billion is lost from developing countries alone due to corruption and bribery, but it emphasized that corruption and bribery also impact developed economies through globalization (UN, 2013).

The devastating effects of corruption in developing countries are unquotable especially in the poor countries of Africa that are struggling to overcome their economic underdevelopment (Mauro 1995; Bardhan 1997; Laszlo & Alastair, 2000). In Ghana, issues of incidental and systematic corruption are perceived to be high and responsible for the slow pace of development (Lamptey, 2014). The causes of corruption are multi-facets, but in the case of developing economies such as Ghana, whose population is largely religious (Christianity &

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Islam), its sources are increasingly important to investigate. Ghana currently ranks 98th out of 144 countries on a global percentile measure of irregular payments of bribes in public contracts, which indicates weak institutional structure (World Economic Forum, 2014). However, at the same time she is religiously ranked second after Nigeria in West Africa.

The ignition in the religion-corruption nexus stems from the argument that fairness and honesty form the basis of many religions and as such, religious leaders can be utilized in the fight against corruption (Times of Zambia, 2003; AllAfrica.com, 2006; Luxmoore, 1999, Mauutte, 2013). Faithful adherents to religion will refrain from corruption because of the inherent theft, dishonesty, illegality, and mistreatment of others. It is argued that none faithful adherents of religions are most likely to engage in corruption because of the absence of religious guidance (Beets, 2007). The ethical dimension aspect of religion focuses on the ethical teachings of religion such that, there is no religion without ethical teachings. This includes code of conduct and standard of behaviour that is in conformity with the social norms. Religion often sets the pace for any society about its social norms, mores and moral values. The implications of this probably explain why Adesina (2003), argued that religion takes its place in the context of the social pressures that influences personality, because it is the force which has mostly influenced the character of mankind.

Past literature has established the importance of religion at the aggregate economic level (Iannaccone, 1998; Durlauf, Kourtellos, and Tan, 2012; Barro and McCleary, 2003; Shariff and Rhemtulla, 2012; Arrunada, 2010; Barro and McCleary, 2003). In contrast, it is still unclear whether it plays a role in the pervasiveness of corruption in Africa. This gap in research is surprising, given that religion has been identified as an important factor influencing individual and other economically relevant behaviour (Iannaccone, 1998; Durlauf, Kourtellos, and Tan, 2012; Barro and McCleary, 2003; Shariff and Rhemtulla 2012; Arrunada, 2010; Barro and McCleary, 2003). However, Mauutte, (2013) and Durlauf, et. al., (2012) have questioned the empirical evidence for a causal relationship between religion and levels as well as prevalence of corruption since methodologies employed thus far are insufficient for proving a causal relationship.

In spite of these numerous studies, religion has received scant attention in studies of public sector corruption in Africa, a surprising omission given the extensive literature on how religion influences individual economic and political behavior. While prior studies link religiosity to economic development (Barro, and McCleary, 2003; Barro, and McCleary, 2005; Arrunada, 2010; Durlauf, Kourtellos, and Tan, 2012; Shariff and Rhemtulla, 2012), examining religions, religiosity and corruption in Ghana is important for several reasons. First, government directs the social development of an economy, which oils the engine of the broader economy. By breeding and feeding on inefficiency, corruption invariably strangles the economy usually leading to economic downturns. Second, the public sector serves as a better laboratory for studying duty bearer s' risk-taking behavior and its consequences because their direct dealings in using public purse largely creates more opportunities and the flexibility to engage in corrupt behaviors than private sector, and also governments are significantly more responsive to external grading shocks than private firms because it affects their loan bids and investment attraction internationally. Therefore, the question is, if religion leads individual citizens to adopt certain, positive attitudes and behaviors, does religiosity function similarly and leads to less corrupt government?

The findings of the paper showed that while religions in general increase corruption, it is insignificant for corrupt behaviours. Secondly, we found that socio economic status and education might directly impact corrupt behavior among public sector workers. Overall, this article makes two main contributions to the corruption literature. First, the article address calls to look at micro level data mechanisms through which religion leads to corruption (Marquette, 2013;

Durlauf, Kourtellos, and Tan, 2012). Second, the article advances the literature by demonstrating empirically how religious innovations relate to the various dimensions of corruption in the public sector. The rest of the paper is organised as follows. The next section reviews the literature followed by the research model and the hypotheses to be tested. This is followed by the description of the research methods and results of the hypotheses. The discussion of the findings was presented next and the conclusion. The final section presented the practical implications and limitations of the study as well as directions for further research.

## Literature

Several studies attempt to build a theoretical model to analyze causes of corruption and its consequences (Mishra, 2006; Khan, 2006; Guerrero and Rodríguez-Oreggia, 2008; Matei and Matei, 2009). However, these studies were generally interested in modeling the relation between corruption and economic development (Macrae, 1982; Basu, 2006; Djumashev, 2006; Mocan, 2007; and Ebben and De Vaal, 2009). Empirically, a growing number of studies investigate the causes and effects of corruption across countries (Mauro, 1995; Herzfeld and Weiss, 2003; Dreher and Herzfeld, 2005; Serra, 2006; Carraro *et al.*, 2006; and Mutascu, 2010). All these studies have established empirical relationship between corruption and a variety of economic and non-economic determinants. Nevertheless, missing from these empirical studies is cultural dimension especially religion as a cause of corruption.

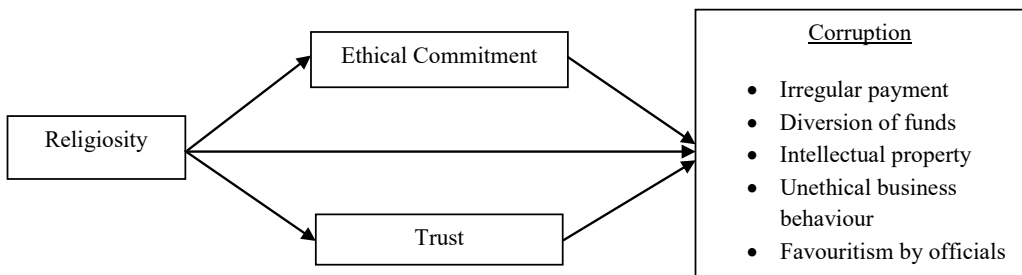
Literature on the impact of religion on deviant attitudes and behavior has established a significant negative relation between the individual level of religiosity and the possibility of deviant behavior (Stack and Kposowa, 2006). Baier and Wright (2001) in a meta analysis find that the greater the religiosity the less likely individuals are to engage in criminal activity. Hirsch and Stark (1969) studied the relation between church attendance and delinquent attitudes and behaviour. They find that attendance at church does not influence either actual delinquent acts or attitudes towards delinquency. Recently, Marquette (2010) asserts that the influence of religion on attitudes towards corruption is not clear as many factors come together to form these attitudes such as gender, age, education level and the nature of religion and religious community involved. Tittle and Welch (1983) examined the relation between religiosity and attitudes towards tax fraud, observe negative relation between religiosity, mostly represented through church attendance, and tax cheating. The result shows no difference between religious and non-religious respondents regarding behavior that is condemned by society as a whole, such as major theft, assault and tax evasion. Stack and Kposowa (2006) confirmed Tittle and Welch (1983) study when they expanded the scope of the data.

North and Gwin (2006) argue that a religious society is expected to be relatively more moral than a nonreligious one. However, as Marquette (2010) cautions, a logical fallacy may exist in this argument since it presupposes that all religions emphasize the same moral codes. Weber, (2010) and Jagodzinski (2009) support Marquette (2010) critique by establishing empirically that followers of different religions hold different views on what constitutes morality. The level of religiosity might not be the only important explanatory factor when investigating its relation with the perceived corruption levels but also the type of religion. According to Stack and Kposowa (2006), literature on the impact of religion on deviant attitudes and behavior succeeds in establishing a significant negative relation between the individual level of religiosity and the possibility of deviant behaviour.

Some studies have investigated the relation between religion and corruption ( La Porta *et al.*, 1999; Treisman, 2000; Paldam, 2001; Bonaglia *et al.*, 2001; Chang and Golden, 2004) but few e from Africa (Marquette (2010b) which seems to relate to the continent. Common to these studies

is that religion reduces corruption. Devettere (2002) opines that the most effective way to combat global corruption is through giving high attention to virtue ethics. North and Gwin (2006) use a country-aggregated level data to assess whether religion affects the levels of rule of law and corruption. The authors' results show that the proposed effect of religion on corruption and rule of law is inconsistent since it significantly differs depending on the status of religious data being used. North and Gwin (2006) and Flavin and Ledet, (2008) find an insignificant relation between the public adherence to certain religion in a country and its perceived level of corruption. Flavin and Ledet (2008) use survey-based data to check if religiosity has a significant effect on the level of governmental corruption in the US states during the period 1990-2002. Although the authors use three different measures of religiosity, which are religious belief, belonging, and behavior, they find little systematic relationship between any of these measures of religiosity and corruption. Thus, religion does not seem to directly "purify" government corruption in the American States. This finding seems to have contradicted Beets and Mauquite assertion on the effectiveness of religion as an instrument to curb corruption. The fact is religiosity does not imply mere going to places of worship or littering public places with posters and magnificent signposts and structures but rather the reflection of the teachings of a particular religion on the value and attitudes of its adherents is a strong determinant of one being religious.

In a sample of 124 countries, La Porta *et al.* (1999) examined how political and religious factors affected varieties of measures of good governance. Most relevant to our study, they find that countries with higher proportions of Catholics and Muslims had lower property rights protection and higher corruption, although these results were not robust to the inclusion of GNP per capita and latitude. In a similar study, Treisman (2000) studies the determinants of corruption using several corruption indices covering between 36 and 64 countries. Regarding religion, he finds that the percentage of population that is Protestant generally had a small but statistically significant effect in reducing corruption. In addition, Dreher, Kotsogiannis, and McCorriston (2007) study the determinants of corruption in a sample of approximately 100 countries, and find that corruption was lower where there was stronger rule of law, higher educational attainment, and long-standing democracy. Although the results were not reported, Dreher, Kotsogiannis, and McCorriston apparently analyze the impact of religion on corruption but find no significant effects. Finally, Paldam (2001) analyse the effect of the population shares of several religions on corruption. He finds that a higher share of Protestants was correlated with less corruption compared to Catholic and Orthodox shares. From the review of literature, the conceptual framework is specified as follows



## 4. Method

### 4.1 Sample

Data was collected by means of a survey questionnaire distributed to adherence of Christianity and Islam within December, 2015 at the gate of a church temple or mosque after worship. Thus, all respondents had to be at the mosque or a church temple. This technique was based on the idea that, purposively selecting respondents will best help to investigate the problem under study and answer the research questions (Babbie, 2013; Creswell, 2014). Of the 375 questionnaires administered, all 375 questionnaires were return, since they were self administered by field assistants. Out of this, 64.7% were females while 35.3% were males. In terms of age, 12.5% were between 21-30 years, 43.1% were between 31-40 years, 42.7% were between 41-50 years and the rest were between 51-60 years. Again, out of the 375, 66.7% were Christians while 33.3% were Muslims. On educational qualification, 19.8 % had a Masters degree, 52.3% had a Bachelor's degree, 0.4% had a PhD degree, 16% had post secondary education and the remaining 13% had professional qualifications such as ACIB, IHRM, ACCA and CA. Of the total, 54.6% were married between 5-10 years, 41.3% had less than five years of experience of marriage, 3.9% and 2.2% had experience of 11-15 years and more than 15 years respectively with their current wivies or husbands. Respondents occupy positions of lay reader, choiristers, adherents, church leaders or Imman.

### 4.2 Measures

All the indicators in the study allowed respondents to answer on a five point Likert-Scale (1=strongly disagree, 5= strongly agree). Corruption was measured with five items used by World Value Survey (2010). These five (5) items measured corruption on the dimensions of intellectual property infringement, diversion of public funds, irregular payments and bribes, favoritism in decisions of government officials, and unethical behavior of firms.

Similarly, religiosity was measured with three (3) items from the scale developed by world value survey (2010). Respondents were asked to indicate how important religion is in their life, apart from weddings, funerals and christenings, how often do they attend religious services these days, independently of whether you go to church or not, would you say you are a religious person?

Studies that involve generalized trust often perceived the concept as multi-dimensional (Van Scotter and Motowidlo, 1996; Motowidlo, Borman, and Schmit, 1997). For instance, Van Scotter and Motowidlo (1996) observed that confidence in the justice system, confidence in the government in terms of performance and confidence in the police service all come to build trust in a country. Therefore, in this study trust is measured using the above dimensions.

### 4.3 Consistency of the Research Instrument

The consistency of the research instrument was tested with respect to content validity, internal consistency, construct validity, and composite reliability. With respect to content validity, a thorough review of the literature was done and adopted instruments that were well accepted and valid to represent the variables. The instrument was pre-tested with professionals, academicians and selected respondents for their adequacy and relevance. This helped established content validity of the items (Straub, 1989). The internal consistency evaluation was reliable as the computed Cronbach's alpha values show that the instruments are reliable as all Cronbach's alphas are much higher than 0.70 (Hair *et al.*, 2010; Tabachnick and Fidell, 2013). The construct

validity was examined by applying Confirmatory Factor Analysis (CFA) using AMOS where the Average Variance Extracted (AVE) values were higher than 50.0 percent indicating acceptable survey instrument (Hair *et al.*, 2010). The calculated composite reliability scores also indicated that the degree of construct reliability was acceptable.

#### 4.4 Statistical Analysis

Test for normality (skewness and kurtosis) shows that, all the variables fall within the acceptable statistical limit (Hair *et al.*, 2010; Meyers *et al.*, 2013). A test of proposed framework with the methodology of Structural Equation Model (SEM) via Analysis of Moment Structures (AMOS 20), and the Maximum Likelihood Estimation (MLE) were done. It has been stated that, SEM is effective for testing models that are path analytic with mediating variables (Byrne, 2009). In assessing the model, the recommended two step analysis procedure was followed. (Byrne, 2009; Hair *et al.*, 2010; Meyers *et al.*, 2013). Validation of the measurement model in the first step and structural model in the second step was done.

We examine the fit of both the measurement and structural models with the use of multiple indices as is possible for a model to be adequate on one-fit index but inadequate on many others (Byrne, 2009; Hair *et al.*, 2010; Meyers *et al.*, 2013). Hence, we used the  $\chi^2$  test [with critical insignificant level,  $p < 0.05$ ], the Normed  $\chi^2$  ratio [with critical level not more than three or at most five], and the RMSEA [with critical level not more than 0.08] (Byrne, 2009; Hair *et al.*, 2010; Meyers *et al.*, 2013; Tabachnic and Fidell, 2014).

## 5. Results

### 5.1 Model Evaluation

We studied corruption from five dimensions; hence, we conducted two CFAs to confirm this dimensionality. In the first CFA, we loaded the items into their various dimensions and in the second CFA, we loaded all the items together as overall corruption. The data provided a good fit to the CFA with the five dimensions: ( $\chi^2 = 245.8$ ,  $df = 123$ ,  $p = 0.001$ ,  $\chi^2/df = 2.50$ , CFI = 0.934, IFI = 0.935, TLI = 0.920 and RMSEA = 0.070). Similarly, the data provided a good fit to the CFA for religiosity, trust and ethical commitment.

The result of the measurement is given as: ( $\chi^2 = 503.1$ ,  $df = 301.2$ ,  $p = 0.001$ ,  $\chi^2/df = 1.595$ , GFI = 0.90, CFI = 0.960, IFI = 0.971, TLI = 0.958 and RMSEA = 0.051). All the loadings were high [0.70–0.93] and fell within the accepted range while all the path estimates were significant [ $p < .001$ ] (Byrne, 2009; Hair *et al.*, 2010; Meyers *et al.*, 2013). Also, the indices of the structural model were as follows ( $\chi^2 = 503.1$ ,  $df = 304$ ,  $p = 0.001$ ,  $\chi^2/df = 1.655$ , GFI = 0.893, CFI = 0.948, IFI = 0.948, TLI = 0.940 and RMSEA = 0.053). Therefore, the data provided good fit indices as obtained by both the measurement and structural model.

In our model, religiosity, trust and ethical commitment accounts for 34.7 percent of the variance of diversion of public funds ( $R^2 = .483$ ), 27.2 percent of the variance of irregular payments and bribes ( $R^2 = .272$ ), 29.1 percent of the variance of intellectual property infringement, 29.1 percent of the variance of favoritism in decisions of government officials ( $R^2 = .291$ ) and 47.9 percent of the variance of unethical behavior of firms ( $R^2 = .479$ ). Again, religion accounts for 9.6 percent of the variance in ethical commitment ( $R^2 = .096$ ) and 7.9 percent of the variance in trust ( $R^2 = .079$ ).

**Table I** Consistency and Reliability Measures, and Inter-correlation for all the Variables

Construct	Alpha	AVE	Construct Reliability	1	2	3	4	5	6	7	8
Ethical Commitment	0.81	0.813	0.927	[0.90]							
Trust	0.87	0.782	0.914	0.4	[0.88]						
IPB	0.89	0.68	0.894	-0.32	-0.1	[0.83]					
Diversion	0.88	0.662	0.887	0.52	0.36	-0.34	[0.81]				
favoritism	0.84	0.571	0.841	0.38	0.28	-0.28	0.63	[0.76]			
BH	0.86	0.617	0.865	0.38	0.26	-0.17	0.68	0.74	[0.79]		
Intellectual	0.86	0.568	0.867	0.27	0.3	-0.12	0.31	0.25	0.33	[0.75]	
Religion	0.85	0.754	0.897	0.38	0.26	-0.17	0.68	0.74	0.98	0.76	[0.84]

NB: Diagonal figures inbrackets represent square root of AVE; sub-diagonal entries are the latent construc inter-correlations IPB is the irregular payment & bribes, BH is the business Behavior

## 5.2 Hypotheses Testing

Table II below presents the results of the hypotheses. Hypotheses 1a, 1b and 1c predicted that, there would be a negative relationship between religion and irregular payments and bribes, diversion, and unethical business behaviour while hypothesis 1d predicted a positive relationship between religion and favouritism. The results showed that religion had a positive and significant relationship with favouritism ( $\beta = 0.237, p < 0.003$ ), diversion, ( $\beta = 0.217, p < 0.009$ ) and unethical business behaviour ( $\beta = 0.159, p < 0.027$ ) while the relationship with irregular payments and bribes is negative and significant ( $\beta = -0.292, p < 0.001$ ).

Therefore, hypotheses 1a, 1b, 1c and 1d were supported. Hypothesis 2 and 3 predicted that there would be a positive and significant relationship between religion and ethical commitment, and trust. The results showed that religion had a direct positive relationship with ethical commitment ( $\beta = 0.309, p < 0.001$ ) and trust ( $\beta = 0.281, p < 0.001$ ), providing support for hypotheses 2 and 3.

We hypothesised that trust would be negatively related to diversion, irregular payment, intellectual property infringement and a negative relationship with unethical business behaviour (hypotheses 4a, 4b, 4c and 4d). The results showed that trust had a direct relationship with diversion, ( $\beta = 0.177, p < 0.014$ ), irregular payment ( $\beta = 0.243, p < 0.001$ ) and intellectual property right infringements ( $\beta = 0.150, p < 0.021$ ) and a negative relationship with favoritism ( $\beta = -0.245, p < 0.001$ ). Hence, the results support hypotheses 4a, 4b, 4c and 4d.

We posit that ethical commitment will have a direct and positive relationship with diversion, irregular payment, favouritism, intellectual and unethical business behaviour (hypotheses 5a, 5b, 5c and 5d). The results showed that ethical commitment has a significant and positive relationship with diversion, ( $\beta = 0.355, p < 0.001$ ), irregular payment, ( $\beta = 0.293, p < 0.001$ ) and favouritism ( $\beta = 0.424, p < 0.001$ ) while the relationship between ethical commitment and intellectual property rights infringement was found to be negative and significant ( $\beta = -0.445, p < 0.001$ ), providing support for hypotheses 5a, 5b, 5c and 5d.

The model shows that trust and ethical commitment mediate the relationship between religions and the five dimensions of corruption. Baron and Kenny (1986) maintained that mediation exist when (1) the IV is significantly related to the mediator, (2) the IV is significantly related to the DV in the absence of the mediator, (3) the mediator is related to the DV, and (4) the effect of the IV on DV reduces when the mediator is added to the model. However, MacKinnon, Warsi, and Dwyer (1995) popularized statistically based methods by which mediation may be formally assessed. Hence, we use the Sobel test to examine the mediation effects of trust and ethical commitment. Thus, the purpose of Sobel test is to examine whether a mediator carries the influence of the IV to the DV.

Using the Sobel online calculator based on the formula,  $z\text{-value} = a*b/\text{SQRT}(b^2*s_a^2 + a^2*s_b^2)$ , where  $a$  = raw (un-standardized) regression coefficient for the association between IV and mediator,  $s_a$  = standard error of  $a$ ,  $b$  = raw coefficient for the association between the mediator and the DV (when the IV is also a predictor of the DV) and  $s_b$  = standard error of  $b$ . The results showed that trust mediates the relationship between religions and corruption: diversion (Sobel test = 2.194,  $p < 0.028$ ), irregular payment (Sobel test = 2.586,  $p < 0.009$ ), intellectual property infringement (Sobel test = 2.047,  $p < 0.040$ ), favouritism (Sobel test = 2.394,  $p < 0.030$ ), unethical business behaviours (Sobel test = -2.739,  $p < 0.006$ ). This mediation was not partial because the relationship between religion and corruption was found to be insignificant.

**Table 2** Hypotheses Test Results

<b>Hypothesised Relationship</b>		<b>t-values</b>	<b>p</b>
H1a: Religion → Corruption	0.465	0.690	0.4536
H1b: Religion → Favouritism	0.217	2.606	0.009
H1c: Religion → Irregular	0.159	2.210	0.027
H1d: Religion → Intellectual	-0.292	-3.769	0.001
H1d: Religion → Diversion	0.309	4.344	0.001
H1d: Religion → Business behaviour			
H2: Religion → Trust	0.309	4.344	0.001
H3: Religion → Ethical commitment	0.281	4.004	0.001
H4a: Trust → Favouritism	0.177	2.469	0.014
H4b: Trust → Irregular	0.243	3.204	0.001
H4c: Trust → Intellectual	0.15	2.300	0.021
H4d: Trust → Diversion	-0.245	-3.554	0.001
H5a: Trust → Business behaviour	0.355	4.706	0.001
H4b: Ethical commitment → Favouritism	0.293	3.897	0.001
H5c: Ethical commitment → Irregular	0.424	6.314	0.001
H5a: Ethical commitment → Intellectual	0.355	4.706	0.001
H4b: Ethical commitment → Diversion	0.293	3.897	0.001
H5d: Ethical commitment → Business beh.	-0.445	-6.260	0.001



Finally, the results showed that ethical commitment mediate the relationship between religion and corruption: diversion (Sobel test = 3.048,  $p < 0.002$ ), irregular payment (Sobel test = 2.806,  $p < 0.005$ ), favouritism (Sobel test = 3.387,  $p < 0.001$ ), intellectual property right infringement (Sobel test = 3.102,  $p < 0.048$ ), and unethical business behaviours (Sobel test = -3.389,  $p < 0.001$ ). Again, this mediation was partial because the relationship between religion and corruption was found to be insignificant. Further, to make the results robust, control variables such as gender, education and socio economic status were included. However, there were no significant differences among the respondents in terms of gender, and experience. But positive relationship between socioeconomic, education and corruption was found. People with high income level were more likely to engage in corruption as well as very much religiosity. Besides, highly educated people know the rules and how to manipulate them to suit any corrupt behaviour.

## 6. Discussion

The main objective of the paper was to examine the relationship between religion and five dimensions of corruption: diversion of funds, irregular payment and bribes, government officials' favoritism in decision making, intellectual property right infringement and unethical business behaviour through trust of institutions and ethical commitment. First, the findings showed that religion, trust and ethical commitment have relationship with all the dimensions of corruption. Second, we found that trust and ethical commitment fully mediate the relationship between religion and all the dimensions of corruption. Previous studies have found a positive relationship between religion and corruption (Dreher, *et al.*, 2007; Treisman, 2000).

However, these studies did not examine corruption from these five dimensions. On the other hand, the finding was consistent with a conceptual framework of Durlauf, *et al.*, (2012) that demonstrate the relationship between religion and various dimensions of corruption. Of interesting from the findings was that, religion had a positive relationship with diversion of funds, favouritism and unethical business behaviours but a negative relationship with irregular payment. Therefore, the findings from the study showed that religion does not only lead to positive corruption but also reduces irregular payment and bribes. Thus, religiosity and religions will lead to corruption in terms of core job functions, diversion of funds, favouritism as well as unethical business behaviours while at the same time reducing intellectual property right infringement.

Consistent with previous studies, we found that religion is positively related to trust and ethical commitment (Durlauf, Kourtellos, and Tan, 2012; Shariff and Rhemtulla, 2012; Arrunada, 2010). Thus, this finding showed that the religiosity of people is likely to induce positive ethical attitudes of workers and trust of public institutions. Religious practices are generally seen as investment in heaven which in turn increases trust and commitment to ethical values of any organisation people find themselves (Barro and McCleary, 2003; Shariff and Rhemtulla, 2012; Arrunada, 2010; Weber, (2010) and Jagodzinski, 2009). This finding provides support for the ethical teachings of religions which suggests that when people are married with their religious denomination's values and doctrines, they are likely to eschew corrupt behaviours and rather promote organisational investments in positive ways such as commitment to their jobs. Thus, religious practices trigger and force people to produce changes in work attitudes of trust and ethical values.

Our findings suggest that religious people attitude of trust and commitment to ethical values are related to all the five dimensions of corruption. These findings also support previous studies that have found a relationship between ethics and business performance (Barro and McCleary, 2003; Shariff and Rhemtulla, 2012; Arrunada, 2010; Weber, (2010) and Jagodzinski, 2009). Thus, trusted and committed people to religious values were more likely to put in more discretionary effort

to reduce corrupt behaviour in the pursuit of their official duties. At the same time such people will not engaged in unethical business behaviours that will undermine the well-being of their people and country (Durlauf, Kourtellos, and Tan, 2012; Barro and McCleary, 2003; Shariff and Rhemtulla, 2012; Arrunada, 2010).

Finally, we found that trust and commitment to ethical values perfectly mediate the relationship between religion and all the dimensions of corruption. This finding was consistent and provides support to previous studies (Treisman, 2000; Barro and McCleary, 2003; Dreher, *et al.*, 2007; Arrunada, 2010; Durlauf, *et al.*, 2012; Shariff and Rhemtulla, 2012). This finding generally supports the tenets of the economics of religions in that religious practices generate trust and commitment in terms of performance through positive ethical work attitudes. Our findings therefore showed that, countries and employers who implement specialised religious freedom gain commitment and trust of their employees, not only reduces negative aspect of corruption but reduce negative employee behaviours as well.

## 7. Conclusions and Implications

The findings of this study showed that religion has a relationship with the five dimensions of corruption: diversion, irregular payment and bribes, favouritism by government officials, intellectual property right infringement and unethical business behaviour. Specifically, whereas religion increases positive aspects of corruption, on the other hand it reduces irregular payments and bribes. We can also conclude that religion is positively related to people work ethics, attitudes of trust and commitment to institutions. Again, we found that trust and ethical commitment has a negative relationship with diversion and irregular payment but a negative relationship with unethical business behaviours. Finally, we found that trust and ethical commitment partially mediates the relationship between religion and the five dimensions of corruption. From these findings, we conclude that religion does not only increase corruption but also promote unethical business behaviours through the mediating role of trust and non compliance to ethical values.

It may be said that this finding is partially consistent with Barro and McCleary, 2003; Jagodzinski, 2009; Weber, 2010; Arrunada, 2010, Shariff and Rhemtulla, 2012). Therefore, we contribute to the literature by integrating these conceptual frameworks in the Ghanaian religious context about the relationship between religion and corruption. Thus, we contribute to the literature and take both concepts of religiosity and corruption a step ahead by demonstrating how religion influences corruption. Second, the study has contributed to the religious literature by examining the mechanisms through which religion leads to corruption. Again, we contributed to the understanding of how religion relates to the various dimensions of corruption. In spite, of the abundant literature on the fact that corruption is multi-dimensional, previous studies on the relationship between religion and corruption (Shariff and Rhemtulla, 2012; Arrunada, 2010; Weber, 2010) did not show how religion relates to the various dimensions of corruption. Therefore, the blind spot of Beets, (2007) that exist in the literature concerning the mediating mechanisms through which religion may influence the various dimensions of corruption has been unlocked.

The result of the study has three important implications for government and organisations implementing and intending to implement religious programmes and systems. First, government and organisations can allow religious practices to increase negative corrupt behaviours and reduce unethical business behaviours. Second, managers and organisations can benefit with positive work attitudes of trust and ethical commitment through the implementation of religious system. Finally, managers and organisations should note that trust and ethical commitment mediates the relationship between religion and corruption. Therefore, they should implement and invest in

religious programmes and systems that will heighten their employees' trust and increase their commitment to gain maximum positive performance from employees. Thus, it is only when a religious system triggers these important religious outputs that government and organizations can achieve the goal of reducing corruption.

## 8. Limitations and Recommendations

The findings of the study should be interpreted with caution. First, the study used a cross-sectional data; hence, conclusions regarding causality cannot be made. That is, the results must be interpreted as associations rather than causality. Second, the data for this study was collected from adherence of religions (Christian and Muslim) who were purposively returning from mosque or temple selected in Ghana with the use of a simple random sampling technique. Therefore, the findings of this study cannot be generalized to all Ghanaians. Third, there is no agreement upon which set of religious practices should be used for empirical research. Accordingly, the three practices selected for this study may not be representative of all the religions in Ghana. However, the practices included in this study are among the most widely used practices in research and practice (Flavin and Ledet, 2008).

Based on the findings and limitations of this study, we make suggestions for further research. First, even though longitudinal research is both expensive and time consuming, future research would benefit from testing this study's model through a longitudinal research design so as to determine the causal links more explicitly. Second, although this study has clearly demonstrated the importance of trust and ethical commitment as partially mediating the relationship between religion and corruption, more research is still needed to gain a better understanding of these relationships. Other variables such as doctrines, motivation and location of religion can be added. Finally, the study only used sample of worshippers' returning from a church temple or mosque. Therefore, the literature would benefit by comparing results from employees at their offices to determine whether religion is solely responsible for the relationships found in this study.

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