

Does Religion Affect Capital Structure in Indonesia?

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ABSTRACT

The purpose of this study is to analyse the influence of the religion and religious values of Chief Executive Officers (CEOs) on capital structure in public companies in Indonesia. The religious values embraced by CEOs are reflected in their involvement in fraud cases and the frequency of their attendance at board meetings. The study used a sample of 231 companies (1,386 observations) over the period 2010-2015. It was found that if firms had a Christian CEO this would have a significant impact on capital structure due to the higher debt levels, compared to CEOs of other religions. Conversely, Muslim CEOs had an insignificant impact on capital structure. Similarly, CEOs who were involved in fraud cases had more debt than those not involved in such cases. CEO attendance at board meetings also had a significant positive impact on corporate debt level.

Keywords: Attendance, CEO's religion, debt, fraud

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INTRODUCTION

The role of religion in economic activity is an important issue and has long been the focus of extensive literature. According to Lagace (2001), how individuals combine personal religious values with business life is "one of the major fields that has not been much researched". Recent studies have shown that religion influences personal behaviour and economic development (Jiang et al., 2015). However, it is still largely unclear how individual religious

beliefs affect company behaviour, such as the influence of the behaviour of the Chief Executive Officer (CEO) on investment decisions and a company's capital structure. This is therefore an interesting topic to study.

Mismanagement in deciding capital structure, such as too high a proportion of debt or equity, will result in high capital costs. This situation can lead to low profitability and possible bankruptcy (Ahmed Sheikh & Wang, 2011; Brigham & Houston, 2004; Chadha & Sharma, 2015). To solve this problem management, one may have to commit fraudulent acts in the corporate financial statements due to the inability of the company to cover the high cost of capital. This situation is also driven by the company's obligation to fulfil contractual clauses with creditors/investors by showing prospective profit and fulfilling the targeted Debt to Equity Ratio (DER) with liquid working capital. The cases of World Com. Inc, Enron and Kimia Farma Tbk indicate that the potential for fraud by management/executives is related to incorrect decisions on capital structure (Scott, 2006).

The preferences and style of risk management played a role in the combination of debt-equity in determining a firm's capital structure (Maness & Zietlow, 2005). This view is supported by Barton and Gordon (1987) and Berger and Udell (1998), who found that executive behaviour on corporate financial decisions making was influenced by company-specific factors such as risk and control, one's behaviour such as norms, religion (culture), attitudes, preferences and desires.

Such behavioural decisions are also based on the planned behaviour theory, in which antecedent intention is seen as a determinant of one's behaviour and that intention is a function of attitude and subjective norms of behaviour (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1977). The subjective norm of behaviour in this study is the religion and religious values embraced by CEOs. Religions that people have faith in can shape behaviour throughout their lives and provide the foundation for their moral life, leading to the quality of self-appreciation and attitude of people who tend to aspire to the noble values they believe in (Kum-Lung & Tek-Chai, 2010).

Every religion teaches and emphasises religious values that should not conflict with social norms. However, in the Islamic concept, any decision or act of conduct must be based on the Hadith and the Quran; for example, the use of funds related to interest is considered usurious and is a practice strictly forbidden (Ali-Imran [3]: 130), as affirmed in Indonesian Council of Ulema Decree No. 1/2004. On the contrary, in Christianity, due to the great demand for capital to boost commerce and the economy, priests allow interest-bearing financing activity (usury) (Ackerman, 1981; Iannaccone, 1998; Noonan, 1993). In addition, in Hinduism, the concept of interest is written in the book of Manawa Dharmasastra VIII, 142, in which it is considered very reasonable and acceptable. On the other hand, the books of Buddhist and Confucian teachings do not discuss the subject of interest, as they put more emphasis on philosophical teaching. This indicates that there may be differences

in individual behaviour when making a company's financing decisions based on the religious teaching that an individual has received.

Previous research has found that the cultural/religious characteristics of a region affect capital structure decisions, with firms located in Catholic-majority regions tending to have larger debts than those in Protestant-dominated ones (Baxamusa & Jalal, 2014). This is because there are wide differences between Catholics and Catholic characteristics and Protestant culture. Protestants believe that the economic benefits of property ownership should accrue to the owners. In contrast, Catholics consider property to be more of a social good. This difference is important, as it has implications for ownership rights and, by extension, stock ownership. Second, Protestants believe that each individual should determine what is right for himself other-self. In contrast, the Catholic Church is the arbiter of the common good. Stulz and Williamson (2003) suggested that this difference had led to Protestants being more individualistic than Catholics.

On the other hand, Gunn and Shackman (2014) found that there was no significant difference in terms of debt ratios between Islamic and non-Islamic countries. However, different findings were made by Abraham (2013), that Islam had a significant negative effect on the formation of the capital structure of banks in Saudi Arabia, where state-owned banks tended to have lower debts than those with foreign ownership. The most recent research in

Asia conducted by Jiang et al. (2015) found that the religiosity of family business founders with Western religions (Islam, Catholicism or Protestantism) had debts and risks that tended to be lower than those practicing other religions. Meanwhile, the religiosity of family business founders with Eastern religions (Buddhism or Taoism) had no significant impact. This study aims to develop the research of Baxamusa and Jalal (2014) and Jiang et al. (2015), focusing on CEOs' religious behaviour and religious values, and the effects of these on a company's capital structure. A CEO's religious values are the ethical norms that serve as the reference for the personal norms for a corporate leader, as governed by Financial Services Authority Regulation No. 33/POJK.04/2014, such as the morality and obligation to lead and manage for the benefit of the company. The morality of executives reflects their behaviour in terms of not deviating from the provisions based on the norms of society in general, such as being honest, and not committing corruption or other disgraceful acts. Such executive behaviour can be indicated by ascertaining whether executives are involved in fraud cases (Grullon et al., 2009). A manager with stronger morality and integrity should have better religiosity, thus preventing directors, managers and employees of the company from committing fraud (Dyrenge et al., 2012; McGuire et al., 2012). Persons (1995), Spathis (2002) and Skousen et al. (2009) found that the tendency for fraudulent actions seen in financial statements was related to financial leverage. Other executive

religious values and norms include the obligation to lead and manage the company for its own benefit by considering the principles of good corporate governance. The implementation of good corporate governance is an important part of the effort to improve company efficiency, as it is expected to reduce corporate agency costs and to keep the moral hazard behaviour of management/corporate executives at bay (Jensen & Meckling, 1976). The role of executives is reflected in their attendance at board meetings. At such meetings, proactive CEOs will participate in formulating strategic decisions, overseeing the planning, monitoring ethical behaviour, ensuring the accuracy of financial reporting and legal compliance, implementing good governance effectively, and protecting the interests of stakeholders (Rezaee, 2004). Chen and Chen (2012) found that regular board meetings could help allocate capital very efficiently, while Achchuthan et al. (2013) and Khan and Wasim (2016) found that CEOs' attendance at meetings had a significant positive effect on leverage.

This research is focused on public companies in Indonesia. Indonesian data are used because first the situation in Indonesia is very different from that in developed countries, although the fact that Muslims comprise the majority of the population (BPJS Centre, 2010) may not be reflected in the behaviour of businesses in the country. Based on preliminary data collected by the researchers through the observation of 1,386 samples (2010-2015), 34.2% of CEOs are Muslim; 48.3% are Christian (Catholic

and Protestant), and 17.5% are in other categories (Confucian, Hindu, Buddhist and Atheist). Second, CEOs play an important role in companies, being responsible for all corporate business matters, including legal issues relating to the business of the company (Financial Services Authority Regulation No. 60/POJK.04/2016). Third, the reason for using Indonesian data is one of practicality.

Referring to the literature discussed above, it can be concluded that the main proposition of this paper is that corporate financial decisions vary, particularly those related to capital structure, and this variation seems to be related to differences in the religious behaviour and values of CEOs. The research findings indicate that if companies with Christian CEOs (Catholic or Protestant) tend to have greater debt levels compared to CEOs of different religions (Abraham, 2013), it is suggested that such companies adopt better policies to protect shareholder rights and to improve stock market efficiency in order to encourage greater market share participation (Stulz & Williamson, 2003). On the other hand, with regard to Muslim CEOs, there appears to be no significant impact on debt, perhaps because they are less obedient in practising their religious teachings and the financial decisions they make are more likely to be influenced by other directors.

It was found that religious values reflected in fraudulent acts show that the CEOs involved in fraud cases tend to have a higher level of debt compared to others. Companies should apply consistent law

enforcement to keep moral hazard practices in check to help achieve an information-efficient capital market in trading activities in the Indonesian capital market. CEO attendance at board meetings has a significant positive impact on corporate debt level. CEOs tend to be risk-takers when choosing sources of funding to expand corporate business and in the aggressive exploitation of investment opportunities by management (Achchuthan et al., 2013). Therefore, it is expected that companies will implement good corporate governance, transparent principles, accountability, responsibility, and independence and fairness of corporate governance, which should lead to the disbursement of funds based on calculated risk, without exceeding the maximum limit of debtors' lending ratings.

The remainder of the paper is organised as follows. Section 2 addresses relevant literature and presents the study hypothesis. Section 3 describes the data and methodology of the study, while Section 4 presents and discusses the results. Section 5 provides the robustness test results, and Section 6 is the closing statement.

Literature Review and Hypotheses

Management and styles related to risk preferences play a role in debt-equity combinations when determining a company's capital structure (Maness & Zietlow, 2005). This argument is supported by Barton and Gordon (1987) and Berger and Udell (1998), who found that executive behaviour when taking financial decisions, apart from being influenced by company-

specific factors related to risk and control, was also influenced by behavioural factors such as norms, religion (culture), attitudes, preferences and desires. Such behavioural is also based on the theory of planned behaviour, in which the antecedent of intention is seen as a determinant of one's behaviour, and that will is a function of attitude and subjective norms on behaviour (Ajzen & Fishbein, 1980). The subjective behavioural norms in this study are the religion and religious values of the CEO.

Mittelstaedt (2002) found that religion and religious institutions influenced the economy through various market activities and the government (Smith, 2007). Religions play an important role in everyday life and people's ethical behaviour (Weaver & Agle, 2002). Religions shape the entire life of individuals and provide the foundation for morality, leading to the quality of comprehension and attitude of those who tend aspire to the noble values in which they believe (Kum-Lung & Tek-Chai, 2010).

People who are raised religiously exhibit the same beliefs and preferences, even when they reject religion as adults. Similarly, they find that cultural traits persist from generation to generation, even when the underlying institutional factors have changed substantially (Guiso et al., 2002). A person's attitude cannot be separated from the activity of deciding how to behave. This decision on behaviour is based on behavioural intention as a function of attitude and the subjective norms of behaviour (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1977). The subjective norms of behaviour in

this study are reflected in CEOs' religious behaviour and their religious values in the form of ethics and morality, which should serve as a reference for owners/managers in running their businesses.

Indonesia is the largest Muslim country in the world, with Islamic followers constituting 87.18% of the country's population (BPJS Centre, 2010), but this is not reflected in the business conditions of companies listed on the Indonesia Stock Exchange. Preliminary data collected by the researchers comprised a sample of Muslim CEOs (34.2%), Christian (Catholic and Protestant) CEOs (48.3%), and others categories (Confucian, Hindu, Buddhist and Atheists) (17.5%) from the observation of 1,386 sample.

Therefore, the proxy for the CEOs' religious behaviour in this study is not seen from the religious denomination of the religious territory of the company (Baxamusa & Jalal, 2014; Gunn & Shackman, 2014), but is viewed from the religious behaviour of the CEOs, whose religion is predominantly embraced on the Indonesia Stock Exchange by assuming that they have the same level of obedience as their Muslim and Christian (Catholic and Protestant) peers, as is the case of CEOs with other beliefs (Confucian, Buddhist, Hindu and Atheist). Therefore, CEOs' religious values serve as a proxy for measuring their belief in the norms of their religious teachings, namely honesty, discipline, responsibility and a high standard of morality as reflected in their ethical values, together with the responsibility of CEOs who are involved

in moral hazard (fraud) cases and their attendance as directors at board meetings (Financial Services Authority Regulation No. 33/POJK.04/2014).

Abraham (2013) found that the religious characteristics of a particular country, in this case where Muslims were in the majority, had a significant influence on the formation of the capital structure of banks in Saudi Arabia, where state-owned banks had lower debt than those with foreign ownership. Islam has regulated in sharia and the Quran that the source of interest-bearing funding (usury) is strictly proscribed by Islamic law, as stated in Surah 2 (Al Baqarah) verses 275 and 278, and Surah 3 (Ali Imran) verse 130. This is reinforced by a fatwa issued by the Indonesian Council of Ulema (Fatwa No. 1/2004).

This is supported by research conducted by Jiang et al. (2015), who found that the founders of family corporations who embraced the religions of the West (Islam, Protestantism and Catholicism) had less debt and risk, while those who embraced religions of the East (Buddhism and Confucianism), their decision making on corporate were not influenced by their behavior at all. Western religions typically preach the existence of one supernatural God whom their followers worship and with whom they believe that they can communicate with, while Eastern religions often teach a "philosophy of life" rather than contend that there is a single God who interacts with followers. The ultimate goal for adherents of Western religions is salvation or eternal life, while the ultimate goal for adherents of Eastern ones is

enlightenment. The adherents of Eastern religions may not be risk averse, as these religions teach acceptance of uncertainty rather than offering salvation to overcome this and any related anxiety. Miller and Hoffmann (1995) found that followers of Western religions were risk averse, while followers of Eastern religions were not.

Different results were obtained by Baxamusa and Jalal (2014), namely that companies in Catholic regions had higher debt than those located in Protestant areas. This is consistent with the view of Christian reformers (16th Century to 1836), that Christianity should allow interest-bearing loans for capital and business activities. This view is reinforced in Deuteronomy 23:20, which allows for the provision of interest-bearing loans to foreigners. Based on the above sources, the behaviour of a person (CEO) in an organization is also influenced by other factors, such as religion he or she adheres to. Religions that one believes relate to their daily behaviour and form the entire life of individuals that provides a moral foundation for their life in daily and the organizations where they work (Conrad et al., 1998). The attitude and behaviour of individuals indicate the extent to which they are committed to the beliefs of religious teachings (Kum-Lung & Tek-Chai, 2010). Kennedy and Lawton (1998) found that religion was the key social mechanism which influenced people's beliefs and behaviour. Based on the above description, the influence of CEOs' religion on capital structure is posited as follows:

H1a: Muslim CEOs have lower corporate debts than those of other religions.

H1b: Christian CEOs (Catholic and Protestant) have higher corporate debts than those of other religions.

Religious values in this study are measured by fraud committed by CEOs and their attendance at board meetings. The recent moral crisis of entrepreneurs demonstrates ethical violations committed by corporate executives at both international and national levels. To control the unethical behaviour of managers, religious values are required as a social mechanism, which in turn limit unethical corporate practices. Dyreng et al. (2012) and McGuire et al. (2012) found that firms with strict socio-religious norms had higher accrual qualities and lower accounting fraud risks.

According to Chen and Steiner (1999), the tendency of companies to commit breaches of credit agreements may result in financial distress, due to an increase in corporate debt. This is because a company's management will choose to use accounting methods that will shrink leverage ratios by shifting future earnings periods to the current period, when firms have high leverage ratios (Watt & Zimmerman, 1990).

On the other hand, fraudulent behaviour by companies increases information asymmetry between them and creditors. As a result, creditors need to monitor the company more strictly, which increases monitoring costs and will be reflected in increased interest rates and a reduction in the number of loans granted (Chen et al.,

2011). Creditors will consider the financial status of a company when signing contracts with it by using an effective monitoring system. Wei (2006) found a clear positive relationship between loans provided by creditors and a company's financial status. Any fraud committed by a company will change creditors' expectations of its risks and information, which will affect loans made to it. This argument is supported by the findings of Chen et al. (2011), namely that if companies are involved in fraud cases, this will have a significant negative impact on the amount of debt that will be provided by creditors in the short term. Based on the above description, the influence of a CEO who commits fraud related to capital structure is posited thus:

H2: CEOs who are involved in fraud cases have lower corporate debt than those who are not.

Poor performance by a company leads the government to pay more attention to its board of directors. It does this by stimulating the board's activities to to more increase monitoring and control to the company (Sarbanes, 2002). Therefore, CEOs' monitoring of the company's operational performance and sustainability is considered as an important aspect of their obligations. The General Guidelines of Good Corporate Governance of Indonesia of 2006 stipulates that one of the structures and working mechanisms that should be reported regularly is the number of meetings held by the board.

CEOs have a high degree of responsibility and integrity in performing their duties and obligations as directors, a measure of responsibility and integrity CEO one of which is to ensure CEOs' attendance at board meetings. More frequent meetings by the board of directors can improve the quality of the supervision of its managers (Vafeas, 1999) and provide more opportunities for discussions on company performance (Schwartz-Ziv & Weisbach, 2013).

Achchuthan et al. (2013) found that there was a positive relationship between the number of board meetings and a company's leverage. They stated that board meetings had a significant positive effect on capital structure decisions because the number of meetings regularly attended by CEOs tend to increase the level of corporate debt when pursuing an optimal capital structure by minimising average capital costs and maximising the value of the company (Kajananthan, 2012). This indicates that the more frequently meetings are held, the more likely it is the debt ratio will increase.

Based on the concept of the trade-off theory, companies prefer debt to stocks when they have to spend external funds, as the cost of debt is considered cheaper than that of equity (Hansen & Crutchley, 1990). More board meetings result in a higher debt level in pursuing an optimal capital structure, which minimises the average capital cost of the company. This indicates that when meetings are held more frequently, the debt ratio will increase. The associated hypothesis is as follows:

H3: The frequency of CEOs' attendance at board meetings has a significant positive effect on the company's debt level.

MATERIALS AND METHODS

Data on the debt-to-equity ratio, attendance, and control variables such as age, educational background of the CEOs, size, return on assets (ROA), standard deviation of ROA (SDROA), investment opportunity set (IOS), and firm age presented in companies' financial reports from 2010 to 2015 were obtained from <http://www.idx.co.id>. The data collection was based on the purposive sampling method employing several criteria such as that companies should have positive equity, while sharia-originated financing was excluded. The religion of CEOs religions was measured based on the dominant religions present at IDX: Islam, Christianity (Catholic and Protestant), and other beliefs (Confucianism, Buddhism, Hinduism and Atheism).

The CEOs' religious data were obtained through interviews with corporate secretaries, online media, magazines and newspapers. This variable used the dummy symbolised as $DRel_{CEO}$, where $DRel_{CEO|Islam_others}$, dummy variable 1 as Muslim CEOs, 0 = CEOs who embrace other religions, and $DRel_{CEO|Christian_others}$, dummy variable 1 as Christian CEOs, and 0 are CEOs who embrace other religions.

The basic idea of classifying religions in the study was based on the dominant religion of its adherents in Indonesian firms, with Muslim CEOs at 34.2%, Christian CEOs (Catholic and Protestant) at 48.3%,

and others (Confucian, Hindu, Buddhist and Atheist) at 17.5%, based on the observations from the 1,386 samples.

Religious values were represented by the CEO in cases of fraud. Fraud is defined as an act of deliberate deception by a person or an entity that knows that such an action may result in harm to another individual or entity (Audit Board of The Republic of Indonesia Audit [BPK], 2013). This variable used a dummy denoted by DFr , with a dummy variable 1, if the company/board of directors was involved in fraud cases, or 0 otherwise. The fraud data were obtained by taking the following steps: 1) searching online media, magazines and newspapers to detect CEOs involved in fraud cases from 2010 to 2015; 2) cross-checking data with the names of CEOs involved in fraud cases with the data available at the Corruption Eradication Commission/ Financial Services Authority; and 3) using Indonesian positive law as a measure of fraud committed by a company/management, starting from suspects, defendants and convicted persons. The other religious value was the frequency of CEO attendance at board meetings, as represented by the percentage of attendance. This variable is denoted as $Attd_{CEO}$. The following equation was used to examine the influence of religion and religious values on capital structure :

$$DER_{it} = \alpha_{oi} + \beta_1 D_{RELit} - \beta_2 D_{FRit} + \beta_3 ATTD_{it} - \beta_4 AGE_{it} + \beta_5 D_{EDUit} + \beta_6 SIZE_{it} - \beta_7 ROA_{it} - \beta_8 SDROA_{it} - \beta_9 IOS_{it} - \beta_{10} AgF_{it} + e_{it}$$

Data Analysis Technique

The model selection analysis was performed between the pooled least square (PLS) model and the fixed effect model (FEM) and then between the FEM and the random effect model (REM), as can be seen in the Chow test and Hausman test results. The Chow test results show that Prob = 0.0000 for the cross-section F, which is less than 0.05, resulting in the rejection of H_0 . Therefore, it can be concluded with a confidence level of 95% that the panel model is better than the common effect model (CEM). The Hausman test was then conducted, which showed that Prob = 0.0906 for the random cross-section, which is greater than 0.05, implying that H_0 is rejected, so it can be concluded that with a 95% confidence level that the FEM is better than the REM. The results of the Chow and Hausmann tests show that the FEM is more suitable than the REM for use as the panel data regression model. The descriptive statistical analysis shown in Tables 1 and 2 describes the company-specific variables of religion, fraud and attendance. The debt equity ratio

(DER) is the ratio of total debt to total equity, while the control variable is a determinant variable that affects capital structure. CEO age and company size is the natural log of total assets. Profitability (return on assets) is the ratio of EBIT to total assets. Business risk is the standard deviation of ROA; the investment opportunity set is formulated as market value divided by asset value (MB/VA) = [total assets - total equity + number of shares outstanding x stock closing price] / total assets. Company age, CEO religion, CEO education background and fraud are the dummy variables.

Based on the descriptive statistics presented in Table 1, the average proportion of the debt to equity ratio of all firms in the sample is 120.7%. The average use of corporate debt is greater than equity, indicating that companies tend to use debt rather than their equity for corporate financing (Mayers & Majluf, 1984). The frequency of CEO attendance at board meetings at all companies in the sample is 94%, indicating that such presence was quite frequent for companies on the Indonesia Stock Exchange.

Table 1
Descriptive statistics

	DER	AttdCEO	AgeCEO	SIZE	ROA	SDROA	IOS	AgFirm
Mean	1.207	0.940	54.000	24.189	0.110	0.0120	1.394	10.328
Median	0.876	0.980	54.000	26.311	0.091	0.0060	1.078	10.275
Maximum	4.130	1.000	86.000	34.708	0.683	0.3420	7.586	11.552
Minimum	0.020	0.460	49.000	11.518	-0.777	0.0002	0.044	8.006
Std. Dev.	1.091	0.094	9.169	4.974	0.130	0.0200	0.953	9.650

Table 2 illustrates that the proportion of CEOs committing fraud was 11.8% of the sample, demonstrating the fraud committed by those CEOs according to their religion. The highest number of fraud cases was in line with the following religions: 47.56% for Christian directors; 29.88% for Muslim directors; and 22.56% for those with different beliefs. Observing the percentage of fraud committed by the CEOs of other religions (Confucianism, Buddhism and Hinduism), the figure is quite high, at 22.56%. This shows that fraud can be committed by any CEO, regardless of their religious background.

Table 3 shows the results of the regression assumption test, in which the data are normally distributed (Walpole, 1982). The correlation value between the independent variables indicates that there is no indication of multicollinearity. This can be seen from the correlation between independent variables of <0.8; this shows that the correlation between the independent variables is not an indication of multicollinearity, autocorrelation or heteroscedasticity, thus the above regression model can be used in the study.

Table 2
Category variable

	Fraud	Non Fraud	Economy	Non Economy	Islam	Christian (Catholic & Protestant)	Others (Khonghucu, Budhist, Hindu, Atheis)
Frequency	164	1.222	616	770	474	670	242
Percentage	88.2	11.8	44.4	55.6	34.2	48.3	17.5
					Islam	Christian (Catholic & Protestant)	Others (Khonghucu, Budhist, Hindu, Atheis)
Fraud (mean)					29.88	47.56	22.56
Attd (mean)					0.89	0.88	0.90

Note: In terms of the CEO's religion, the dummy variable 1 represents Muslim CEOs and 0 is for others, and the dummy variable 2 represents Christian CEO's and 0 is for others. For the fraud variable, the dummy variable 1 represents CEOs who have committed fraud and 0 is for others. For the educational background variable, the dummy variable 1 represents CEOs with economics as their educational background and 0 is for others.

Table 3

Testing assumption regression

Regression assumption	Test	Test result
Normality	JB-test : $0.000 < \alpha = 5\%$	Abnormal, because of the amount data >1000, said approach normal data central limit theory, Walpole (1991)
Multicollinearity	Correlation between independent variables <0.8	No multicollinearity
Autocorrelation	Dwstat $0.97099 < Dwstat < 2.05436$	Durbin Watson 1.506024 this study is an independent autocorrelation test
Heterokedasticity	Obs*R Squared 0.2484 > $\alpha = 5\%$	No heterokedasticity

RESULTS AND DISCUSSIONS

Table 4 presents the results of the multiple linear regression test with the fixed effect model. Obviously, many company-specific factors can explain the level of debt recorded by a company. Therefore, the main independent company control variables include age, the educational background of the CEOs, size, ROA, SDROA, IOS and AgFirm. The estimation results and statistical model of *H1b*, *H2* and *H3* show a significant impact of religion, fraud, attendance and CEO age on capital structure. This suggests that Christian CEOs in Indonesian public companies tend to have a higher debt level than those who believe in other religions, as indicated by a positive and significant coefficient of 1%. The results related to *H1b* follow the study proposition and are in line with research by Abraham (2013), Baxamusa and Jalal (2014) and Jiang et al. (2015) namely that religion influences decisions on the capital structure of companies. This study provides evidence that the behaviour of a CEO in an organization is influenced not only by the

internal and external factors of the company, but also by another factor, namely the religion of the CEO. Religion is believed to be related to daily behaviour and shapes the entire life of individuals, providing the foundation for moral life and leading to the quality of life and attitude of those.

The attitudes and behaviours of individuals indicate the extent to which they are committed to their religious beliefs (Kum-Lung & Tek-Chai, 2010). This is indicated by the behaviour of Christian CEOs, whose religious teachings allow interest-bearing loans (Iannonce, 1998; Jiang et al., 2015). Therefore, there is a tendency for them to use debt as a corporate source of funds, indicating that the religious teachings trusted by CEOs are reflected in deliberate behaviour (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1977). *H1a* is rejected, implying that Muslim CEOs do not have an influence on capital structure. This result shows that Muslim CEOs may be less devoted to their religion and less obedient to the teachings of Islam. It also applies to CEOs' religious values. CEOs involved in

Table 4

Regression result of religion and religious values to capital structure

	Coefficient (Std Error)
Constant	0.286*** (0,0113)
Rel _{CEOIslam_O}	0.0053 (0,036)
Rel _{CEOKristen_O}	0.1145** (0,0265)
Fraud _{CEO}	0.1084*** (0,0252)
Attd _{CEO}	0.1364** (0,0569)
Age _{CEO}	0.0072** (0,0015)
Edu _{CEO}	-0.1026 (0.0145)
SIZE	0.0137 (0.0039)
ROA	-0.3545*** (0.0647)
SDROA	0.1854** (0.0147)
IOS	-0.0145** (0.0056)
AgFirm	0.0173*** (0.0024)
Adjusted R ²	0.511
No. of Obs Firm-Year	1.386

Note: *significant at 10%, **significant at 5%, ***significant at 1%.

fraud cases tend to have larger debts than other CEOs, as indicated by a positive and significant coefficient of 1%.

The result of *H2* is different to the research of Chen et al. (2011), that companies involved in fraud cases will experience a significant negative impact on the amount of debt provided by creditors, as fraud will

cause information asymmetry between the company and its creditors/funders. This finding relates to research conducted by Qiang (2003) and Scott (2006), who found that managers involved in fraud cases preferred to take more risks. This means that there is a tendency for the company/board of directors involved in fraud to have greater

debts than others. CEO attendance at board meetings (H3) has a significant positive effect on corporate debts, indicating that debts still provide a higher return than the cost of the debts themselves (Kajanathan, 2012).

CEO age has a significant positive effect on corporate debt, indicating that the older the CEO, the higher the company debt. This suggests that older CEOs are more willing to take risks and use more debts, tending to be overconfident. The finding is different to that of Kyenze (2014), who found that there was a significant relationship between capital structure and age; companies that had old board members tended to choose leverage or a low debt ratio compared to young boards. Educational background has no significant effect on capital structure, as every company requires different skills according to its needs (Kusumastuti et al., 2007).

The regression results also show that firm size has no significant relationship with debt, which is in line with Modigliani & Miller (1958). Profitability has a significant negative effect on the level of company debt. This empirical evidence suggests that higher corporate profitability has a low debt ratio, indicating that the company owns and employs a substantial amount of internal funding (Mayers & Majluf, 1984; Rajan & Zingales, 1995).

Business risk has a significant positive effect on the level of company debt. This empirical evidence shows the higher the company risk, the greater the debts required to finance its investment. The preference of boards of directors/corporate management

in Indonesia with regard to risk is as risk-seekers. This is because funds derived from debts still provide additional benefits (return) that are greater than the required cost of funds due to business uncertainty (Hansen & Crutchley, 1990). Investment opportunity set (IOS) has a significant negative impact on a company's capital structure; companies with a high IOS tend to use internal funding sources.

This condition is inseparable from the cost incurred from corporate funding choices. Future investment options selected by management are expected to result in a greater return compared to the cost of equity and can provide benefits to the company (Kallapur & Trombley, 1999). Investors will take account of companies with better growth for their investments due to the stock return gained by them in the future.

Company age has a significant positive impact on debt, indicating that a company needs external funding until its situation reaches an optimum level (Van der Wijst, 1989).

Robustness Test

The next robustness test was conducted as shown in Table 5. For the first robustness test, a different dependent variable was used, i.e. the debt-to-total assets ratio, since this debt ratio reflects another proxy for measuring a company's capital structure (Baxamusa & Jalal, 2014). The first column of Table 5 shows the estimated coefficients, which are consistent with the previous finding. It is found that Christian CEOs and debts have a significant relationship, with

a significant probability at a statistically significant level of 1%, while fraud and attendance showed significance levels of 1% and 10%.

The results of the robustness test show that the variables of religious behaviour and religious values have a significant impact on decisions regarding firms' debt level, which is similar to the test results for the debt-to-equity ratio shown in Table 4. For the control variables, the age of directors, ROA and company age have a significant impact on the debt ratio, with the same direction coefficient as in previous findings. For the second robustness test, a different size of sample, with the value of the debt-to-equity ratio surpassing the mean value, was used. The results show that the variables of religious behaviour and values have a significant impact on decisions regarding corporate debt, with a significance level of 5% for Christian CEOs on other religions,

fraud with a significance level of 1 % and attendance significance level of 5%, which is consistent with previous findings. The results of this study show consistent evidence that religions and values influence CEOs' behaviour in determining corporate capital structure. In addition, the controls of ROA, StdROA, IOS and Agfirm companies have a significant impact on the debt ratio, with the same coefficients and directions as in previous findings. It is recognised that the results on behaviour based on the religion and religious values of the directors towards capital structure decisions in this study are purely empirical. It is confirmed that developing a theory for this relationship is more challenging than building its existence, as stated by Hilary and Hui (2009) and Jiang et al. (2015), "That religious people seem to avoid risk", and this tends to affect companies' decision making.

Table 5 (Robustness Test)

Regression result of religion and religious values to capital structure

	(1) Coefficient (Std Error)	(2) Coefficient (Std Error)
Constant	0.2147*** (0.0445)	0.3103*** (0.0523)
Rel _{CEOlslam_O}	0.05667 (0.0142)	0.0846 (0.0127)
Rel _{CEOKristen_O}	0.0625*** (0.0143)	0.0742** (0.0118)
Fraud _{CEO}	0.0568* (0.013)	0.042*** (0.041)
Attd _{CEO}	0.1247* (0.045)	0.3462** (0.0281)
Age _{CEO}	0.0025* (0.0014)	-0.0016 (0.0036)
Edu _{CEO}	0.0046 (0.0125)	0.0218 (0.0518)

Table 5 (Continued)

	(1) Coefficient (Std Error)	(2) Coefficient (Std Error)
Edu _{CEO}	0.0046 (0.0125)	0.0218 (0.0518)
SIZE	0.0034 (0.0013)	0.0112 (0.0065)
ROA	-0.1045** (0.0326)	-0.4516*** (0.0136)
SDROA	-0.1446 (0.0132)	0.3056** (0.0158)
IOS	-0.0043 (0.0014)	-0.0475* (0.0246)
AgFirm	0.0015*** (0.0004)	0.0048** (0.0019)
Adjusted R ²	0.558	0.436
No. of Obs Firm-Year	1.386	336

Note: *significant at 10%, **significant at 5%, ***significant at 1%

CONCLUSIONS

CEOs' religion and religious values contribute to different decisions on corporate debt levels (Abraham, 2013; Baxamusa & Jalal, 2014; Jiang et al., 2015). This study contributes to the existing literature with the finding that CEOs' decisions on corporate financing are influenced not only by financial and risk factors, but also by their religious behaviour and values, which can explain decisions on capital structure. The results of the study indicate that Christian CEOs tend to favour a greater degree of debt than those with other religions; it was the view of the Christian reformers (16th Century to 1836) that Christianity should allow interest-bearing debts in obtaining funding (Hilary & Hui, 2009), although some Christians forbid interest on money or usury in their lives. However, these results

indicate that there is a non-financial factor affecting CEOs' decisions, namely that their religion is based on beliefs in religious teachings that have been embedded and are reflected in the organizational behaviour of CEOs at the Indonesia Stock Exchange.

Therefore, it is expected that Christian CEOs at the Indonesia Stock Exchange should adopt better corporate governance policies, such as improving the quality of risk management committees, committee independence, and the reputation of audit committees to protect shareholder rights and improve stock market efficiency, in an effort to encourage greater shareholder participation (Stulz & Williamson, 2003). As for Muslim CEOs, they have no significant impact on corporate debts. This is because Muslim CEOs are probably not so obedient to their religious teachings, since

their decisions are also influenced by the behaviour of other board members of the company. Besides, it is also probably due to the small number of companies running sharia-based businesses which are listed on the Indonesia Stock Exchange. This means external funding policy the company's at the Indonesia Stock Exchange, tends to be in the form of loans sourced from conventional banking

It was also found that the religious values of CEOs are reflected in their involvement in fraudulent acts. The involvement of CEOs in fraudulent act tends to make their companies have more debt than other CEOs. The situation is explained by the fact that fraud committed by management, such as overstated sales, repo transactions and corruption tends to be associated with a larger debt ratio. Such a ratio means the company has to bear a heavy burden to fulfil its contractual clauses with creditors/investors, driving it to attempt to manage reported earnings by reducing or increasing profits to provide the impression of better corporate performance. Therefore, to overcome fraud there is a need for good corporate governance management, transparency, accountable financial statements, and fairness in providing debt or loans that do not exceed the maximum limit of debt ratings.

Implications

CEO attendance at the board meetings is positively related to capital structure, implying that debt usage still generates a higher return if compared to the cost of

the debt itself. This is because the number of meetings attended by CEOs tends to increase the level of corporate debt in pursuing an optimal capital structure by minimising average capital costs and maximising the value of the company (Kajananthan, 2012). It is also possible that CEOs take more risks in taking advantage of existing investment opportunities and that the creditors feel more secure about the company's loan repayments because of the CEO's attendance at board meetings. The results of this test also indicate that a CEOs' attendance at board meetings shows that they are proactive and participate in strategic decisions, oversee planning, and monitor management's ethical behaviour (Rezaee, 2004), which provides a sense of security to creditors over repayment of what they have lent (Khan & Wasim, 2016).

The limitations of the study are that it measures the CEOs' religion (Islam, Christian or others) by assuming that they have the same level of adherence to their respective religion. In reality, however, some CEOs have stronger beliefs and are more likely to follow religious doctrine than others of the same religion. Another limitation is related to the measurement of fraud variables based on the acts of CEOs who have committed fraud. Using Indonesian positive law, it takes time to declare someone who has allegedly committed a crime as a suspect and to be eventually convicted. Therefore, the data obtained could become invalid soon after the CEO suspected to have committed fraud is free from any criminal charge.

Moreover, the measurement of control variables does not include tangibility, tax, other determinants of corporate governance, such as independent committees, risk management committees or audit committee reputation.

For future research, it would be better if the measurement of CEOs' religiosity were also made by questioning them, as a deeper measurement of religiosity would provide a stronger test. The use of other cultural elements focused on the cultural dimensions identified by Hofstede(2001) would examine of a broader set of non-economic factors.

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