The current issue and full text archive of this journal is available on Emerald Insight at: https://www.emerald.com/insight/2514-9369.htm

# Zakah compliance behavior among entrepreneurs: economic factors approach

Zakah compliance behavior

285

Received 4 September 2019 Revised 3 October 2019 3 November 2019

Accepted 25 December 2019

Saeed Awadh Bin-Nashwan
Faculty of Administrative Sciences, Seiyun University, Seiyun, Yemen

Hijattulah Abdul-Jabbar and Saliza Abdul Aziz Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia, Sintok, Malaysia, and

# Alhassan Haladu

Department of Accounting, Yusuf Maitama Sule University, Kano, Nigeria

#### Abstract

**Purpose** — As one of the constituted main pillars of Islam, *Zakah* compliance (ZC) is mandated upon Muslims from all studies of life. Taking the disappointingly low compliance level in developing countries, including Yemen, as its backdrop, the purpose of this study is to investigate ZC behavior among entrepreneurs, drawing on the economic approach perspective.

**Design/methodology/approach** — The study adopted a cross-sectional design based on a survey of entrepreneurs in Yemen. It used primary data collected via self-administered questionnaires, involving a sample of 500 participants. A variance-based structural modeling equation-partial least squares were used to measure the instruments and assess the hypothesized relationships.

**Findings** – The findings affirmed the suitability of the economic factors approaches in the context of ZC in a developing country. Specifically, the study demonstrated that *Zakah* law complexity has a significant negative influence on ZC of entrepreneurs. It also found a significant positive relationship between religiosity and ZC among the study sample, whereas the study revealed that law enforcement has no influence on compliance behavior.

**Practical implications** — Policies and programs focused on *Zakah* laws and regulations could be formulated to make them less complex and simpler for acceptable levels of ZC. The result is further relevant to policymakers in Muslim communities to strengthen the religious faith of Zakah payers toward compliance with one of the fundamental religious obligations such as *Zakah*.

**Originality/value** – This study enriches the limited previous studies on actual ZC from the perspective of developing communities, especially Yemen. Most importantly, the value was added to the limited literature internationally from an economic aspect.

Keywords Law, Compliance, Religiosity, Complexity, Business zakah, Economic approach

Paper type Research paper

## 1. Introduction

The pursuit of human well-being has garnered growing interest as a more holistic measure of socio-economic progress in any community, as more emphasis tends to be given to



The authors gratefully acknowledge the support of the Nahd Developmental Foundation (NDF), Yemen. NDF helps to develop the community by supporting education and research programs, as well as philanthropy and development projects.

International Journal of Ethics and Systems Vol. 36 No. 2 2020 pp. 285-302 © Emerald Publishing Limited 2514-9369 DOI 10.1108/IJOES-09-2019-0145 Islamic teachings as a way of life for every individual. The Islamic system is neither merely a belief system nor religion in the usual sense, rather it is a complete way of life and a comprehensive system that governs all aspects of followers' social existence individually and collectively (Ahmad *et al.*, 2017). It can be argued fervently that an ideological basis for the Islamic system is bound by the well-being concept, which consists of relations within humans in a society, the outreach of one society to another and the relationship between humans and God (Joshanloo, 2017). *Zakah* could serve as "the causal link" between spiritual belief and economic well-being. The injunction of *Zakah* is, therefore, designed in a way that takes care of the welfare of all members in the community and creates a more prosperous and peaceful culture (Majeed, 2019).

Zakah is considered as a significant mechanism of wealth redistribution and social service provision. It orders well-to-do people to share 2.5 per cent of their productive wealth and dispenses it among the less privileged with lower income in society. Drawing on historical evidence, through a sincere adherence and effective implementation of the noble Zakah system, poverty was almost completely wiped out, and thus, achieved socio-economic and spiritual advancement and wider well-being of all those under his rule (Nazri et al., 2012). Recently, some scholars are of the view that Zakah can considerably contribute to achieving sustained social security and economic prosperity by developing entrepreneurship through mobilizing the Zakah funds in a deliberate way, and thus, boost the gross domestic product (GDP) of the nation (Hoque et al., 2015). It has been argued that the Zakah system if properly monitored and coordinated, could globally generate some US \$600bn every year (Heikal, 2014). However, the renewed advocacy for a vibrant functional system of Zakah has been raised at such a critical time, especially the frustrations caused by the prevalence of the perennial problem of poverty and its damning magnitudes (Hoque et al., 2015). Admittedly, almost half of global poverty resides in Muslim countries, nothing well that the Muslim population constitutes some 24 per cent of the total world population (Pew Research Center, 2017). According to Hoque et al. (2015), Muslim countries only add up 8 per cent to the global GDP, while unfortunately only a paltry sum of GDP (0.8 per cent) was devoted to research and development.

Although relentless attempts and efforts have been made by governments to effectively provide a minimum standard of well-being for society, not much has been attained (Bin-Nashwan et al., 2019). This fact indeed is quite baffling for so many reasons. For instance, Communities have been bestowed with a functioning economic system such as Zakah (in a form of worship) that has numerous profound and social benefits. This can be translated when the haves (high income, rich) spend some of their wealth on the havenots (low income, poor). Zakah can support social programs that generate features of social solidarity and financial inclusion to have an egalitarian and prosperous society, where the well-being of all is given the topmost priority (Al-Qardawi, 2000).

Economically, Zakah also occupies a central place in a country's fiscal policy and operations. This has an impact on the underlying economic aggregates containing all the known functions of the public economy of a modern state; which encompasses curtail excessive income disparities, efficient allocation of resources, stabilization and growth, stimulate economic activities and eradicate unemployment in the nation. As a matter of fact, Zakah has the capacity to provide a stability element to public revenues to be particularly valuable in maintaining budget stability given its fixed-rate and specified expenditure (Daud and Audu, 2011). The beauty of Zakah philosophy is that its impact is not limited only to low-income nations but can also be an automatic stabilizer of Islamic financial potency that provides a permanent mechanism for economic development toward high-income communities. Through the Zakah fund distribution to low-income groups, it is possible to

raise the purchasing power of these groups and improve the consumption expenditures in aggregate, and thus increase consumer demand for goods and services in the market, which will positively stimulate production and economic growth of the community (Daud and Audu, 2011).

Alongside the effects of *Zakah* are felt on the national economy and GDP, the productivity of social well-being is one of the policy frameworks of *Zakah* as being a fiscal resource and social solidarity system that stands on an integral foundation. The allocation of *Zakah* and disbursement among the eligible recipients can serve as a natural fiscal approach in dealing with the plight of poverty, catastrophes, unemployment, indebtedness and inequitable income/wealth distribution in the community (Dogarawa, 2008). Admirably, *Zakah* is an effective aspect of wealth redistribution on an annual basis to keep the vulnerable (poor) propertied and to facilitate full employment attainment. The collection and distribution of *Zakah* can increase employment in two ways, i.e. creating new jobs for *Zakah* management itself and transforming some *Zakah* recipients (*Asnaf*) into productive labors (Kahf, 1999). In contemporary society, *Zakah* can enhance labor force participation and labor productivity, as well as induce spending tendency and restructure production in the direction of goods to fulfill basic necessities.

A resultant impact of *Zakah* on consumption can be fruitful to increase aggregate demand, and *Zakah*'s effect on investment is also anticipated to be positive as *Zakah* can encourage investment by penalizing idle cash and fighting compactness "hoarding capital" (Kahf, 1999). Conclusively, *Zakah* – if well harnesses and given a conducive atmosphere to operate – would, hence, be a potent fiscal and social instrument, which aptly be a source of a stable Islamic economic framework and a coherent community. Such well-being could also be realized not only in this world but also in the ultimate destination (hereafter). Of the things that influence the well-being of all is the way the wealth, which is a trust from Allah, is spent. Allah is the owner of this wealth and has constituted certain values and rules of behavior within a framework of which individuals are expected to use this wealth and to share with each other in this world (Chapra, 2000). It is of utmost significance and the divine injunction that the haves of wealth is compliant to fulfill *Zakah*'s obligation toward others in a way that assists to ensure the well-being and standard of living of all.

Globally speaking, however, there are several countries, which probably share a similar destiny in terms of the success or otherwise of *Zakah*. Apparently, a widening gap between the estimated and actual performance of *Zakah* has almost worsened in all Muslim communities. This has resulted in a tremendous loss of wealth that might positively be contributed to cracking the hard nut of poverty in these societies. Cases of such loss exist in Muslim majority countries such as Malaysia (Saad and Haniffa, 2014); Indonesia (Heikal, 2014); Saudi Arabia (Alosaimi, 2018); Yemen (Bin-Nashwan *et al.*, 2019) and Nigeria (Muhammad and Saad, 2016), as well as in Muslim minority countries such as Philippines (Andam and Osman, 2019). Despite the enforcement of *Zakah* law and operating systems that have been designed, the level of *Zakah* collection remains consistently low and unsatisfactory in these countries (Andam and Osman, 2019). This inadequacy of *Zakah* collection is parallel to the low and distressing compliance behavior of *Zakah*'s instructions among Muslims (Saad and Haniffa, 2014).

Perhaps, of most significance is the fact that if *Zakah* collection unabatedly remained low in Muslim countries, then it can be argued that the scenario is just similar, if not worse in the situation of Yemen, especially the numbers of those entitled to *Zakah* fund; and their needs are heavily on the rise. Admiringly, Yemen is primarily a Muslim state and one of the first countries in which *Zakah* was introduced during the early days of Islam and orderly administered by the government (Bin-Nashwan *et al.*, 2016). Because of the significance of

Zakah to the prosperity of the Yemeni economy and society, the General Directorate of Zakah Obligations (GDZO) (2016) was set up as the respective official authority to collect, distribute and manage fund accruing from various types of Zakah, the most important of which is business Zakah "Urdu Al-Tijarah." Although efforts have been made by the Yemeni Government to overcome the obstacle of low Zakah compliance (ZC) through the constitution of laws and systems of Zakah (e.g. Zakah Law No. 2 of 1999), these efforts have unfortunately not yielded progressive results (GDZO, 2016). According to the Annual Reports of Yemeni Zakah authority (GDZO) for the period of 2011-2016, business Zakah is regarded as the main contributor to total Zakah revenue (from all types of Zakah). However, it has been reported that there is a dramatic drop in business Zakah revenue from 45 per cent in 2011 to 39 per cent in 2014, reaching 36 per cent in 2016. This scenario is not a reflection of reality, whereby all the inhabitants in Yemen are Muslims (Bin-Nashwan et al., 2019). With this fact in mind, the puzzling question is that why should Muslim people be lukewarm and indifferent to complying with Zakah? This is even more worrying given the concerns being raised about entrepreneurs who are considered the most significant contribution to the total state revenue of Zakah.

From a theoretical viewpoint, previous studies have extensively addressed the issue of the behavioral intention of *Zakah* payers and dwelled so much on confirming the suitability of some prevailing behavioral models to explicate the determinants that could influence the intention of Muslims such as the theories of reasoned action (TRA) (Bidin *et al.*, 2009), planned behavior (TPB) (Heikal, 2014) and extended TPB (Andam and Osman, 2019). Nevertheless, *Zakah* literature has likely neglected the actual behavior of *ZC* among Muslims so much so that this fact was frankly reinforced by Bidin *et al.* (2009). Another alternative important interpretation of human compliance behavior is the economic approach, which has been overlooked in extant *Zakah* literature.

Consequently, in an attempt to fill in this gap, the present study aims to answer a call for further research on this direction and strives to provide an in-depth understanding of how the economic factors approach can explain the puzzle of ZC in developing communities generally and more especially in Yemen. The results of this paper are, therefore, expected to be invaluable with respect to the development of relevant and cogent policies to encourage the compliance behavior of Zakah payers. This will subsequently boost Zakah collection, that is sufficiently capable of alleviating poverty and support productivity and sustainable economic growth. Thus, in this study, the relationship between the economic factors [law complexity, law enforcement (LE) and religiosity (R)] and ZC behavior of entrepreneurs in Yemen is examined. It is hoped that the study adds value to the body of the scanty literature in the field and practically serve as an impetus for policymakers to design strategies that further enhance the Zakah functionality as a social well-being instrument for all. Moving forward, the paper reviews the related theoretical background and hypotheses development in Section 2. The research methodology is deliberated in Section 3, followed by the empirical results and discussion in Sections 4 and 5, sequentially. In Section 6, the paper rounds off with concluding remarks, implications and future research directions.

## 2. Theoretical background

# 2.1 Economic approach

The issue of compliance behavior has been approached by economists from the viewpoint of rationality. In the course of this, the obstacle of individuals' failure to comply with a certain rule has resulted in introducing and developing a theory, involving a reliance on assumptions about human behaviors that underlie all of economics. In other words, people are to always act rationally by balancing the cost and benefit of the activity in question

(Allingham and Sandmo, 1972; Alm, 1999; Becker, 1968). The economic theory was proposed by Becker in 1968 and then introduced in the context of tax compliance by a study of Allingham and Sandmo (1972). In Becker's proposition, the crime equilibrium volume can reflect the interactions between LE authority and offenders, and the focus is on both positive and negative incentives with regard to risk and uncertainty (Allingham and Sandmo, 1972). That is people's decisions on whether to evade tax or not constitute a rational choice based on examining the expected cost and benefit of such action. People do not commit a crime as they perceive the risk of being caught, rather than motivated by a deep ethical sense. Thus, when there is a certain and severe punishment, offenders are likely to be deterred from engaging in an unlawful activity (Becker, 1968). Slemrod *et al.* (2001) also argued that people may choose to follow or violate the laws after calculating the gains and costs of their actions.

The economic approach or rational principle, from an Islamic viewpoint, is dependent on the faith or religious belief (Kahf, 1983). As a Muslim, all decisions are essentially made to attain two dimensions of life are present life and hereafter (*Aakhirah*), respectively. In the Islamic faith, the rational principles are not just dependent on the physical utility in the present life but also involve the utility in the hereafter. More clearly, when a Muslim decides to comply with *Zakah* payment, he is obligated to share his wealth with the destitute and the poor among the nation. Thus, this kind of decision derives from a perfectly rational principle to give prominence to serving self-interest and maximizing wealth and sensual satisfaction, i.e. satisfaction in the present life (physical utility) and satisfaction in the hereafter. Further, the decision to comply with *Zakah* payment carries meanings of cleansing and purifying the soul, meanings of growth and enhancement of wealth (blessing from God) and reaps endless rewards (Al-Qardawi, 2000). On the other hand, unfortunate Muslims who are negligent to comply with the religious obligation of *Zakah* (despite being financially able), would be surely subjected to serious consequences (severe punishments) if not in this life, on the Day of Judgment as prescribed by the Quran and the Hadith (Al-Qardawi, 2000).

Through the suitability of the economic approach, it could be argued that rational principles arising from the tax viewpoint must be redefined to match the *Zakah* environment, especially, as *ZC* is not solely dependent upon fiscal burden (benefits and costs). Accordingly, individuals' decision to comply with *Zakah* could rely upon a wider range of components (e.g. spiritual factors). This is because of the fact that *Zakah* originally stems from religious faith established by God, unlike a tax, which arises from fiscal requirements of government. The principle of rationality should not only be considered as utility maximization in the economic sense but also spiritual and sensual satisfaction. To maximize such satisfaction, more obvious laws and definite enforcement must be taken into account, as well as internal factors such as religious values (Ahmad *et al.*, 2011). Although the economic approach has been broadly applied in the area of tax compliance behavior as a prominent model (Alm, 1999; Ayuba *et al.*, 2016; Slemrod *et al.*, 2001), yet empirical studies that used such model in the domain of *ZC* are very scarce. Hence, the model is used in the present study to shed more light on the relationship between *Zakah* law complexity (ZLC), LE and R with *ZC* among entrepreneurs.

# 2.2 Business zakah compliance

The concept of compliance behavior was commonly addressed in tax studies, whereas it is still scarce in the *Zakah* field. Indeed, *ZC* could be defined differently with tax compliance because *Zakah* originated from Islamic religious principles to satisfy the necessary conditions to attain for soul purity and goodness. *ZC* is the degree of acceptance toward *Zakah* payment in accordance with the set-out regulation rulings issued under the *Zakah* authorities (Idris *et al.*, 2003). *ZC* may be based on a voluntary or enforced basis that depends

primarily on the environment in which the individual resides. In Yemen, for instance, *ZC* is legally enforced by statute on a mandatory basis. Several studies have investigated the determinants that influence *Zakah* payers' compliance with business income and strenuously focused on behavioral factors of TRA (Saad and Haniffa, 2014; Sareye and Haji-Othman, 2017) and TPB (Heikal, 2014; Bin-Nashwan *et al.*, 2017).

Saad and Haniffa (2014) tested the relationship between the determinants of TRA with the intention of complying with Zakah. Their study used a survey of 227 Muslim business owners in one district in northern Malaysia. The findings revealed that both attitudes and perceived norms determine the businessmen's intentions to comply with Zakah. Another research was also conducted in Malaysia by Sareye and Haji-Othman (2017). They studied the case of 60 individual business owners in the context of Kuala Ketil in Malaysia. Results showed that the components of TRA are related to business owners' intention to comply with Zakah laws. In the case of Bin-Nashwan et al. (2017), by using the TPB and the analysis was carried out on 202 questionnaires obtained from individual business owners in Yemen. Findings inferred that TPB factors influence intention to give Zakah. Generally, past literature has explored the issue of business ZC based on behavioral perspectives (TRA and TPB), yet empirical studies to examine this issue based on another alternative model like the economic approach are still scarce.

# 2.3 Zakah law complexity

Law complexity is defined as the difficulties to understand law and system and hardships facing the public to compute their liability and some other procedures (Milliron, 1985). Several forms and practices that can be considered as complexity in law or system such as computational and forms complexity [American Institute of Certified Public Accountants (AICPA), 1992], compliance complexity, rule complexity (Carnes and Cuccia, 1996), procedural complexity (Cox and Eger, 2006) and low level of readability (Richardson and Sawyer, 1998).

In the modern Muslim world, some of the countries have legally institutionalized *Zakah* and adopted a wide variety of measures and laws on a mandatory basis as a form of taxation and welfare. Those countries include Yemen, Saudi Arabia, Libya, Sudan, Malaysia and Pakistan (Powell, 2009). Ideally, *Zakah* laws and systems should provide simplicity and a sound understanding of all procedures and processes of *Zakah*, so that its users, especially eligible *Zakah* payers, are able to carry out their liability by knowing the nature of *Zakah* rules. For instance, *Zakah* in Yemen is backed-up by the government, which is issued as a law of *Zakah* No. 2 of 1999 to organize the process of collection, distribution and procedures of *Zakah* in the country. However, *Zakah* law has recently been criticized as intricate and misleading, generating a burden for the public, business and communities (Al-Majidi and Al-Siddiq, 2015).

Although a substantial deal of efforts has been devoted to exploring the determinants influence Muslims' decision to comply with *Zakah*, to the best of the researchers' knowledge, no research to date has examined the influence of *ZLC* on *Zakah* payers' compliance behavior in Muslim countries. However, in the tax literature, the complexity of tax laws and systems is regarded as one of the crucial economic predictors that could exert effect over individuals' compliance (Chau and Leung, 2009). For instance, Cox and Eger (2006) argued that law complexity might be considered a potential cause for carrying out noncompliance behavior. Accordingly, people need to well understand the regulations (rules) for computing their obligation, and these regulations are to be made understandable, clear and simple to consolidate compliance behavior. Richardson (2006) conducted a study in 45 countries and exposed that complexity is the most influential factor of noncompliance behavior, regardless

of income source, education level, perceived tax morality and fairness. In the same vein, Kirchler *et al.* (2006) declared that an individual is more likely to comply with rules when such rules are perceived as less complex. Recently, studies by Gambo *et al.* (2014) and Ayuba *et al.* (2016) have also reinforced the results that law complexity is negatively related to individuals' compliance decisions. Hence, the same effect of ZLC could be predicted on the ZC behavior of Muslims, especially in a regulated environment such as Yemen. It is, therefore, postulated that the more complexity in Zakah laws the eligible Zakah payers perceive, the less the ZC behavior:

# H1. There is a negative relationship between ZLC and ZC behavior of entrepreneurs.

# 2.4 Law enforcement

The rational strategy of *Zakah* authorities should always be to motivate voluntary compliance whenever possible or to facilitate such compliance with whatever available means or mechanism. However, not all *Zakah* payers are compliant, perhaps, most of the compliant tend to be non-compliant at another time for one reason or another. In the course of this, motivations are an alternative strategy to deal with unfavorable behavior and could be introduced in light of the deterrence approach by effective enforcement sanctions (Alm, 1999). According to the Yemeni *Zakah* Law, penalty structure has been enacted in the system to curb the unwanted illegal behavior of eligible *Zakah* payers. Unfortunately, it is still ineffective with weak enforcement by the respective *Zakah* authority (GDZO, 2016).

Early in Islamic history, the first Caliph, Abu Bakar, waged a declared war against defaulters who were disputing the obligation of Zakah and withheld it (Bakar and Rahman, 2007). As for those refraining from Zakah payment without denying its obligation, they are guilty of committing a sin (Al-Qardawi, 2000). Based on Islamic jurisprudence, the task of Zakah collection from the defaulter by force and rebuke is under the ruler's duty, provided the collection is less than required. Al-Qardawi (2000) highlighted the view of Imam Ahmed Ibn Hanbal and Imam Abu Hanifah that empower the ruler to take half of the defaulter's money alongside the due Zakah as a deterred sanction. Unlike tax compliance studies, the examination of the relationship between LE and ZC remains minimal. Alosaimi (2018) contended that when Zakah payers perceive that everyone acts and behaves in accordance with Zakah laws, their compliance behavior would be favorable accordingly. Khamis and Yahya (2015) revealed that strict and effective Zakah LE is positively related to ZC behavior. Sareye et al. (2017) also found LE to have a significant and positive influence on Muslims' decision to comply with Zakah. Hence, a hypothesis was developed to examine the influence of LE on ZC behavior. The higher the influence of LE the stronger will be Zakah payers' compliance behavior. It is, thus, postulated that:

H2. There is a positive relationship between LE and ZC behavior of entrepreneurs.

# 2.5 Religiosity

In recent decades, economic development and performance have been considerably influenced by religious practice and belief. Consequently, it has resulted in an increased interest in religion and spirituality as important subjects of empirical social research (Mohdali and Pope, 2014). R is broadly defined as the extent to which individuals adhere to their religion and its basic teaching (Abdullah and Sapiei, 2018). As for R's impact, past literature has acknowledged that a person's attitude, character and behavior are shaped by

the extent of his/her religious faith (Idris *et al.*, 2012). Religious people truly believe that the divine-reward and punishment approach draws on how to act consistently with favorable religious values and instructions. As such, religious belief is considered the mechanism of intrinsic moral enforcement of individuals that might restrain, violated and behave illegally (Torgler, 2006). Several prior studies in various domains figure out that R plays an important role in human behaviors. For instance, fostering ethical behavior (Keller *et al.*, 2007), tax compliance behavior (Mohdali and Pope, 2014) and hindering criminal attitude (Baier and Wright, 2001).

In explaining the subject of *ZC* determinants, the role of R cannot be underestimated. This is because *Zakah* is not just an instrument meant to attain socio-economic objectives, but primarily financial worship (*Ibadah*) stemming from Islamic religious guidelines. Therefore, *Zakah*'s literature contended that R is a decisive determinant as a highly religious Muslim is likely to be more aware of *Zakah*'s obligation and compliance than a Muslim with low-religious faith (Abdullah and Sapiei, 2018). It has been noticed in previous studies inconsistent results concerning the association between R and *Zakah* payers' compliance. However, numerous research in this field has pointed to a positive relationship between R and *ZC* (Idris *et al.*, 2012; Abdullah and Sapiei, 2018). Idris *et al.* (2003), however, did not reveal any empirical evidence to support R as one of the determinants influencing *ZC*. Apart from the inconsistency in prior studies' results, the significance of R among Muslims is considerably manifest in the literature to greatly stimulate *Zakah* payers to comply with *Zakah* rules. Hence, the hypothesis is postulated that:

H3. There is a positive relationship between R and ZC behavior of entrepreneurs.

## 3. Research method

The present study is a pioneer in using the effect of economic factors on *Zakah* payers' decisions to comply with *Zakah* regulations among entrepreneurs in Yemen. The questionnaire was designed via straightforward and simple wording of questions so that participants can easily understand the questions, delivering high-quality responses in light of their experience and perception. For measurement scales, a total of four items adapted from Ajzen (2002) and Saad and Haniffa (2014) was used to measure "ZC." In a total of six items used to measure "ZLC," four to measure "LE" and six questions to measure "R;" they were adapted from studies conducted by Hanefah (2007), Idris (2006) and Alam *et al.* (2012), respectively. A standardized five-point Likert scale (i.e. 1 = strongly disagree and 5 = strongly agree) was used to assess all questions of the exogenous and endogenous constructs.

The units of analysis of the present research comprised of sole proprietors, partnerships and companies operating in Yemen. In the interim, the sampling frame comprised of those entrepreneurs registered with the Federation of Yemen Chambers of Commerce and Industry (FYCCI) (2016) as eligible *Zakah* payers. There were 56,326 active businesses in Yemen [Federation of Yemen Chambers of Commerce and Industry (FYCCI), 2016]. As recommended by Krejcie and Morgan (1970), the appropriate sample size needed for the study is 382, but the size of 500 was selected to overcome the possibility of non-response and incomplete questionnaires from the respondents. Through self-administered distributed questionnaires, 287 questionnaires were retrieved (representing 57 per cent of the total distributed), out of which 13 responses were badly completed and were, therefore, discarded. Consequently, 274 questionnaires were deemed usable for further analysis. It is worth mentioning that prior to the main study, a pilot study was carried out to test the appropriateness of the instrument of the study, as well as to detect, remove and adjust

ambiguities in the questionnaire. Based on the pilot study responses, some minor modifications were made accordingly.

#### 3.1 Common method bias

Many studies have contended that common method bias (CMB) is a potential issue that might occur in the measurements of behavioral and social research (Fuller *et al.*, 2016; Podsakoff *et al.*, 2003).

As the collected data in the present study is of self-reported nature, CMB could be a threat to the results' validity. According to Podsakoff et al. (2003), CMB refers to systematic measurement errors, resulting from features that meant to represent the construct/trait of interest and originating from characteristics of the specific method being used; where this could be common to measures of other constructs/traits. To minimize the effect of CMB, this study adopted some procedural remedies (Podsakoff et al., 2003). For instance, besides carefully constructing the items, the study informed the participants' prior information that there are no right or wrong answers and that their responses would be assessed anonymously. For the statistical remedy recommended by Podsakoff et al. (2003), the present study used Harman's (1976) single-factor test, asserting that "one fixed factor is extracted from all principle constructs and to explain less than 50 per cent of the variance." Thus, the results of the study exhibited that component one can explain 31.72 per cent of the variance, which is obviously less than 50 per cent. Accordingly, the findings clarified all concerns in relation to CMB that are unlikely to exist in the collected data.

# 3.2 Multivariate normality

Although the use of partial least squares-structural equation modeling (PLS-SEM) does not require to test multivariate normality, a study of Peng and Lai (2012) opposed the idea of making generalized statements concerning the capability of PLS in estimating a model that might violate the assumption of multivariate normality. Thus, the present study evaluated the multivariate normality aspect via an online software tool named web power to estimate "Mardia's multivariate skewness and kurtosis coefficients and p-values." The findings exhibited that the coefficients and p-values of the Mardia's multivariate skewness and kurtosis were ( $\beta = 3.72$ , p < 0.01) and ( $\beta = 27.01$ , p < 0.01), respectively, thus affirming multivariate non-normality. Hence, the study continued using SmartPLS; which is known as a method of non-parametric analysis.

# 3.3 Analysis tool

The current research used PLS-SEM through SmartPLS 3.2 for analyzing and assessing the collected data. PLS-SEM was chosen due to the prediction-oriented nature of the present study, as well as the non-normality issue (Hair *et al.*, 2017). As a template for reporting PLS-SEM, two-stages of analysis were recommended by Henseler *et al.* (2009); assessment of the measurement (outer) model (involves consistency reliability, convergent validity and discriminant validity) and structural (inner) model assessment (coefficient of determination, effect size, predictive relevance and hypotheses testing results).

#### 4. Results

# 4.1 Demographic information

Of the 274 respondents, men were a large majority of 88 per cent with only 12 per cent of women. As shown in Table I, 61 per cent of entrepreneurs were 40 years of age and above, leaving 39 per cent below 40 years. As for the level of education, more than half of the

IJOES				
36,2	Measure	Items	n	(%)
00,2	Gender	Male	241	88
		Female	33	12
	Age (years)	Less than 30	32	12
		30-39	75	27
00.4		40-49	123	45
294		50 and above	44	16
	<ul> <li>Education level</li> </ul>	Up to secondary school certificate	148	54
		Diploma certificate	56	20
		Bachelor's degree and above	70	26
	Period of business	Less than 5	51	18
		5-10	94	34
		11-15	79	30
		More than 15	50	18
	Type of business ownership	Sole proprietorship	229	84
		Partnership	32	11
Table I.		Company	10	4
Demographic profi	les	No response	3	1

entrepreneurs had up to secondary education. About 82 per cent of the entrepreneurs had experience in operating business for 5 years and above, signifying that they are matured and experienced enough to pay business *Zakah*. In terms of business ownership structure, 84 per cent of the selected entrepreneurs had sole proprietorship, while the remaining were either a partnership (11 per cent) or a company (4 per cent). This implies that the structure of business enterprises was very simple and do not have several hierarchical levels.

#### 4.2 Measurement model

To assess the reliability and validity of the study's measurement model, two aspects must be used, the convergent and discriminant validity (Hair *et al.*, 2017).

Convergent validity, in the two-stage model, it is necessary to ensure that all measurement items are converged together in measuring the construct they are supposed to measure. Several criteria are inspected to test for the convergent validity, namely, factor loading (e.g. standardized value 0.70 for exploratory studies), average variance extracted (AVE) (value must  $\geq$  0.50), Cronbach's  $\alpha$  and composite reliability for consistency reliability (both measures must exceed 0.70) (Hair *et al.*, 2017).

For the purpose of this research, all the item factor loadings exceeded the recommended value of 0.70, except for ZLC6 and R5. These two items were less than 0.70, which could affect the reliability of the overall data of the study is kept in the analysis. Thus, the two items were eventually dropped. In terms of the AVE, all of the AVE values for constructs exceeded the required value of 0.50; the lowest and highest values of AVE were 0.550 (ZC) and 0.671 (ZLC), respectively. As for internal consistency, both measures of Cronbach's a and composite reliability for the entire construct values were well over 0.70. To report the multicollinearity issue, the study also assessed the variance inflation factors (VIF) and the values of VIF for all constructs were less than 5. This confirmed that multicollinearity was not of concern in the present study (Hair et al., 2017). Table II discloses the results of convergent validity and consistency reliability.

A discriminant validity test is also required to ascertain the study's measurement model. It is achieved when a construct can be discriminated from other constructs within the same model. The aspects applied to assess discriminant validity include

Fornell and Larcker's (1981) criterion, cross-loadings and heterotrait-monotrait ratio (HTMT) of correlation (Hair *et al.*, 2017).

For the Fornell–Larcker test, the latent variable must indicate more variance in its own variables than other variables. based on this criterion, the square root of AVE of every construct must be higher than other square correlations in the model (Henseler *et al.*, 2015). The results of the Fornell–Larcker criterion for discriminant validity are displayed in Table III. Cross-loadings was also used to test discriminant validity. For all constructs, the

Zakah compliance behavior

295

Construct	Items	Mean	SD	CA	CR	AVE	VIF
ZC	4	2.709	0.702	0.729	0.830	0.550	_
ZLC	5	3.470	1.347	0.927	0.946	0.927	1.121
LE	4	2.615	0.824	0.834	0.871	0.630	1.030
R	5	3.562	1.066	0.903	0.928	0.721	1.116

Table II. Convergent validity and consistency reliability

**Notes:** SD = standard deviation; CA = Cronbach's  $\alpha$ ; CR = composite reliability; AVE = average variance extracted; VIF = variance inflation factors

Items	ZC	ZLC	LE	R
ZC – Item 1	0.721	-0.551	0.062	0.250
ZC – Item 2	0.745	-0.502	0.112	0.219
ZC – Item 3	0.731	-0.432	0.158	0.234
ZC – Item 4	0.769	-0.574	0.115	0.344
ZLC – Item 1	-0.464	0.728	-0.114	-0.155
ZLC – Item 2	-0.666	0.897	-0.124	-0.316
ZLC – Item 3	-0.653	0.918	-0.131	-0.256
ZLC – Item 4	-0.629	0.914	-0.136	-0.295
ZLC – Item 5	-0.654	0.938	-0.138	-0.324
LE – Item 1	0.159	-0.162	0.873	0.111
LE – Item 2	0.033	-0.033	0.725	0.069
LE – Item 3	0.047	-0.102	0.725	0.114
LE – Item 4	0.128	-0.099	0.841	0.111
R – Item 1	0.309	-0.258	0.137	0.792
R – Item 2	0.342	-0.298	0.104	0.900
R – Item 3	0.256	-0.230	0.125	0.815
R – Item 4	0.347	-0.311	0.064	0.870
R – Item 6	0.235	-0.192	0.135	0.864
Fornell–Larcker criterion				
ZC	0.742			
ZLC	-0.701	0.882		
LE	0.148	-0.146	0.794	
R	0.358	-0.311	0.130	0.849
HTMT ZC				
ZLC	0.838			
LE	0.167	0.139		
R	0.426	0.326	0.148	

Note: The italic values in the matrix above are the item loadings and others are cross-loadings

**Table III.** Discriminant validity

loadings of the items on their own construct were loaded higher than others on reflective items (Hair *et al.*, 2017). As seen in Table III, no lack of discriminant validity was confirmed. A relatively new assessment for discriminant validity is HTMT. It is an estimate of the upper boundary of the correlation between constructs. Using a value of 0.85 as the recommended threshold (Henseler *et al.*, 2015), the present study concluded further evidence for establishing the discriminant validity of all the latent variables, which have met the conventional standard.

### 4.3 Structural model

The next step in PLS-SEM is to address and assess the structural model results. In the present study, the structural model assessment was tested using a procedure called "bootstrapping with an iteration of 5,000 samples" to evaluate (path coefficients) path relationships (Hair *et al.*, 2017). As can be observed in Table IV, the results revealed a negative and statistically significant relationship between ZLC and ZC of entrepreneurs ( $\beta = -0.649$ ; t = 16.457; p = 0.000). However, LE ( $\beta = 0.033$ ; t = 0.629; p = 0.265) was found to have no significant effect on business ZC. Finally, compliance behavior was positively and significantly influenced by R ( $\beta = 0.152$ ; t = 3.081; p = 0.001). The structural model results are demonstrated in Table IV and Figure 1.

Based on the results of effect size  $(f^2)$  contained in Table IV, ZLC showed a large effect on ZC behavior among the sample. While R was found to have a small effect on compliance behavior. LE, on the other hand, exhibited a trivial effect on Zakah payers' compliance behavior. The coefficient of determination or variance explained  $(R^2)$  of the endogenous latent variable, as visualized in Figure 1, was deemed moderate, and therefore, acceptable. Using the blindfolding method through PLS is another criterion applied to further assess the quality of the model; known as predictive relevance  $(Q^2)$ . A value greater than 0 signifies that the accuracy of the path model is acceptable (Hair et al., 2017). The  $Q^2$  value of the endogenous variable in this study was above zero, thus affirming an adequate prediction

Hypothesis and path	β	CI – Min.	CI – Max.	t-value	<i>p</i> -value	$f^2$
$H1: ZLC \rightarrow ZC$ $H2: LE \rightarrow ZC$	-0.649 $0.033$	-0.708 $-0.046$	-0.578 $0.119$	16.457 0.629	0.000 0.265	0.772 0.002
$H3: \mathbb{R} \to \mathbb{ZC}$	0.152	0.073	0.236	3.081	0.001	0.043

**Table IV.**Structural model results and path analysis

**Notes:** ZLC = Zakah law complexity; ZC = Zakah compliance; LE = law enforcement; R = religiosity; CI = confidence interval

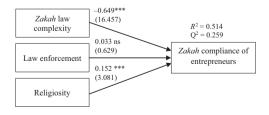


Figure 1. Structural model

**Notes:** ns = non-significant; \*\*\*p < 0.01

# 4.4 Importance – performance map analysis

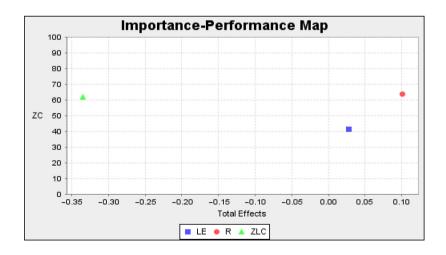
To extend the standard PLS-SEM findings, the current study considered a post hoc importance-performance map analysis (IPMA). The IPMA aims to contrast the total effects (importance of predecessor constructs) of the structural model on an endogenous latent construct/target construct with the average values of latent variables (performance) (Hair *et al.*, 2017). In the present study, the analysis was done by using ZLC, LE and R as variables and ZC behavior as the target construct. As evident in Table V and Figure 2, ZLC was the most important factor in determining ZC behavior, as reflected by its highest importance value but slightly lower performance value. It can be claimed that a one-unit decrease in the performance of law complexity would increase the performance of compliance behavior by a value of total effect (-0.335). Next came R, it possessed the highest performance value (63) with relatively high importance (0.100). Finally, displaying the lowest importance and performance values (0.028; 41), LE established that the construct had less priority in predicting ZC.

#### 5. Discussion

To improve the functionality of the *Zakah* system in Muslim communities, serious and adequate consideration of ways to enhance *Zakah* payers' compliance behavior must be given the attention it deserves, as *Zakah* has a decisive financial impact that cannot be

	ZC of entrepreneurs		
Target construct	Total effect	Performance	
ZLC	-0.335	62.114	
LE	0.028	41.135	
R	0.100	63.644	

**Table V.** IPMA of *ZC* as target construct



**Figure 2.** IPMA of *ZC* as a target construct

discounted. Implementation, and indeed, previous studies on ZC have been launched from behavioral aspects (e.g. TRA and TPB), but are still rarely captured from other vital and alternative perspectives such as economic approach. To address this gap, the present research investigated the role of economic factors (law complexity, LE and R) on the ZC behavior of entrepreneurs in Yemen.

The empirical findings demonstrated that the three sets of economic factors collectively explained 51.4 per cent of the variance level of ZC behavior. Interestingly, the study found that ZLC has a significant and negative effect on ZC behavior. Thus, the hypothesis (H1) was fully supported. As for the  $f^2$  value, this path showed a substantial effect of 0.772 among all constructs. This result is corresponded with a study of Cox and Eger (2006); indicating that the decision of being compliant with laws is taken based on simplicity levels in such rules and laws. In fact, the more the law complexity the less its compliance or the more its noncompliance. That is, entrepreneurs as eligible Zakah payers tend to appreciate a Zakah system and law that does not require a burden or time of compliance, as well as achieves much simplicity, especially in a competitively challenging business environment, where much attention is directed toward profit-generating strategies.

According to the findings, LE had no effect on ZC behavior, thus hypothesis (H2) was rejected accordingly. This decision was further exhibited by a f<sup>2</sup> value of 0.002 (no effect). The result obtained is not surprising given some of the prior studies' findings. Studies of Ahmad et al. (2011) and Idris (2006) also reported that Muslims' decision to comply with Zakah obligation is not influenced by LE. Although, in Yemen, Zakah law has been supported with penalty regime (20 per cent of the payable Zakah) on those defaulting, yet its enforcement provisions are hinged (GDZO, 2016).

The results of this study disclosed that a positive and significant relationship exists between R and ZC behavior of entrepreneurs, and thus supported the postulated hypothesis (H3). As can be acknowledged that Muslims with high religious faith would show compliant behavior to pay Zakah compared to those with low R. The finding is consistent with some previous studies (Abdullah and Sapiei, 2018; Idris et al., 2012). In a country such as Yemen, where all its inhabitants are wholly Muslims, such a result may play a vital role in guiding Zakah's authority to pay much attention to encouraging the religious values of Zakah payers. As such, it is further useful to other Zakah authorities in Muslim states.

## 6. Policy implications and conclusion

The present study has bridged the gap in the literature on *ZC*, which is a major impediment besieging many *Zakah* authorities in the developing world. The study has confirmed particularly a salient approach like an economic approach that produced an accurate prediction of *ZC* behavior. Although Yemen is one of the earliest Muslim countries that government coordinates and manages all *Zakah* functions orderly in accordance with enacted law, the noble socio-economic objectives of *Zakah* are still a mirage in the country; where the government incapacitated to get the destitute poor out from poverty trap and assist the less privileged to be as self-reliant as possible. Against such a backdrop, this research investigated the *ZC* behavior on businesses (as the highest contributor to total *Zakah* revenue) in Yemen, under the premises of economic aspects.

The result of this research provides theoretical contributions to literature in many ways. First, it serves as empirical evidence that confirms the utility of the economic approach. This study has re-defined the economic approach, which is primarily derived from fiscal government requirement (tax), to suit cautiously with Islamic divine instrument (*Zakah*). The study further refined the model by investigating the influence of ZLC, LE and R on ZC among entrepreneurs. The influence of ZLC has probably not been captured in literature

either theoretically or empirically. Finally, the paper also addressed the paucity of previous research confining on the actual compliance behavior of *Zakah* payers (entrepreneurs), particularly in a less privileged community such as Yemen.

In terms of the practical implications of the study, the findings could guide both Muslim governments, as well as *Zakah* authorities/agencies, not only in Yemen but also in other communities, in designing suibio programs and policies related to further boosting *Zakah* collections, especially in a business environment and entrepreneurs, as they serve as a major revenue for *Zakah* funds. More precisely, the respective authorities may initiate sensitization programs to build a sufficient awareness of *Zakah* and its role in the equitable distribution of wealth, social security and economic prosperity that can be derivable from compliance. Moreover, governments may put relentless efforts in place to rearticulate a more userfriendly *Zakah* law for a functional *Zakah* system, and thus overcomes such a potential cause of noncompliance. Islamic scholars and personality could also be involved with government agendas that endeavor in educating *Zakah* payers regarding religious benefits, as well as the vital consequences of *ZC*. To this end, it is hoped that further pioneering steps must be taken by policymakers on effective and efficient opportunity and option to improve *Zakah* funds, and thus serve its main purpose of fighting poverty among mass people of Muslims.

As for the limitations, it is acknowledged that the present research could not exhaust all of the determinants that could have influenced *Zakah* payers' decisions to comply with *Zakah*, and future studies may extend the model platform of the study to integrate other important aspects, e.g. social and psychological. Furthermore, the present research used a cross-sectional approach in predicting *ZC* and its determinants, and data was collected over a specific period of time. However, *Zakah* payers' perception of compliance behavior may change over time. Thus, future research may use a longitudinal analysis.

### References

- Abdullah, M. and Sapiei, N.S. (2018), "Do religiosity, gender and educational background influence zakat compliance? The case of Malaysia", *International Journal of Social Economics*, Vol. 45 No. 8, pp. 1250-1264.
- Ahmad, M., Dziegielewski, S.F., Tariq, I. and Bhutta, A.Z. (2017), "Zakat as a social safety net: assessing its perception in a less-developed rural district in Pakistan", *Journal of Social Service Research*, Vol. 43 No. 3, pp. 369-380.
- Ahmad, S., Nor, N.G.M. and Daud, Z. (2011), "Tax-based modeling of zakat compliance", Jurnal Ekonomi Malaysia, Vol. 45 No. 1, pp. 101-108.
- Ajzen, I. (2002), "Constructing a TPB questionnaire: conceptual and methodological considerations", available at: https://people.umass.edu/aizen/pdf/tpb.measurement.pdf (accessed 24 October 2016).
- Alam, S., Janor, H., Zanariah, C. and Ahsan, M. (2012), "Is religiosity an important factor in influencing the intention to undertake Islamic home financing in Klang valley?", World Applied Sciences Journal, Vol. 19 No. 7, pp. 1030-1041.
- Allingham, M.G. and Sandmo, A. (1972), "Income tax evasion: a theoretical analysis", *Journal of Public Economics*, Vol. 1 Nos 3/4, pp. 323-338.
- Alm, J. (1999), "Tax compliance and administration", Public Administration and Public Policy, Vol. 7 No. 2, pp. 741-768.
- Al-Majidi, T.Q. and Al-Siddiq, B.I. (2015), "Accounting problems of zakat on Islamic banks' funds in the republic of Yemen", *Journal of Economic Sciences*, Vol. 16 No. 2, pp. 130-148.
- Alosaimi, M.H. (2018), "Factors influencing zakah on business compliance behavior among sole proprietors in Saudi Arabia", Unpublished thesis, Universiti Utara Malaysia.

- Al-Qardawi, Y. (2000), Figh al Zakah. A Comparative Study of Zakah, Regulation and Philosophy in the Light of Quran and Sunnah, Scientific Publishing Centre King Abdul-Aziz University, Jeddah, Saudi Arabia.
- American Institute of Certified Public Accountants (AICPA (1992), ) Blueprint for Tax Simplification, AICPA, New York, NY.
- Andam, A.C. and Osman, A.Z. (2019), "Determinants of intention to give zakat on employment income: experience from Marawi city, Philippines", *Journal of Islamic Accounting and Business Research*, Vol. 10 No. 4, pp. 528-545.
- Ayuba, A., Saad, N. and Ariffin, Z.Z. (2016), "Perceived service orientation, economic factors, psychological factors and tax compliance: evidence from Nigerian SMEs", Malaysian Management Journal, Vol. 20, pp. 41-57.
- Baier, C.J. and Wright, B.R. (2001), "If you love me, keep my commandments a meta-analysis of the effect of religion on crime", *Journal of Research in Crime and Delinquency*, Vol. 38 No. 1, pp. 3-21.
- Bakar, N.B. and Rahman, A. (2007), "A comparative study of zakah and modern taxation", Journal of King Abdulaziz University: Islamic Economy, Vol. 20 No. 1, pp. 25-40.
- Becker, G.S. (1968), "Crime and punishment: an economic approach", *Journal of Political Economy*, Vol. 76 No. 2, pp. 169-217.
- Bidin, Z., Idris, K.M. and Shamsudin, F.M. (2009), "Predicting compliance intention on zakah on employment income in Malaysia: an application of reasoned action theory", *Jurnal Pengurusan*, Vol. 28, pp. 85-102.
- Bin-Nashwan, S.A., Abdul-Jabbar, H. and Aziz, S.A. (2019), "Do enforcement, religiosity and peer influence zakah compliance behavior?", *International Journal of Financial Research*, Vol. 10 No. 6, pp. 42-53.
- Bin-Nashwan, S.A., Abdul-Jabbar, H. and Romle, A.R. (2016), "The application of the theory of planned behavior on business zakah compliance in Yemen: a proposed framework", *Middle-East Journal of Scientific Research*, Vol. 24 No. 6, pp. 2052-2057.
- Bin-Nashwan, S.A., Abdul-Jabbar, H. and Romle, A.R. (2017), "Perception of business owner toward business zakah compliance intention", World Journal of Islamic History and Civilization, Vol. 7 No. 2, pp. 17-22.
- Carnes, G.A. and Cuccia, A. (1996), "An analysis of the effect of tax complexity and its perceived justification on equity judgments", *The Journal of the American Taxation Association*, Vol. 18 No. 2, pp. 40-56.
- Chapra, M.U. (2000), "Is it necessary to have Islamic economics?", The Journal of Socio-Economics, Vol. 29 No. 1, pp. 21-37.
- Chau, G. and Leung, P. (2009), "A critical review of Fischer tax compliance model: a research synthesis", Journal of Accounting and Taxation, Vol. 1 No. 2, pp. 34-40.
- Cox, S.P. and Eger, R.J. (2006), "Procedural complexity of tax administration: the road fund case", *Journal of Public Budgeting, Accounting and Financial Management*, Vol. 18 No. 3, pp. 259-283.
- Daud, M. and Audu, M.A. (2011), "The economic significance of the zakah system: an exploratory analysis of its fiscal characteristics", Elixir International Journal, Vol. 36, pp. 3085-3090.
- Dogarawa, A.B. (2008), "Islamic social welfare and the role of zakah in the family system", *International Conference on Islamic Law and Muslim Minorities, Ghana, October, 25-26.*
- Federation of Yemen Chambers of Commerce and Industry (2016), (FYCCI) "Annual report. Statistics of registered business owners with Yemeni chambers of commerce and industry", available at: www.fycci-ye.org/ar/ (accessed September 30, 2017).
- Fornell, C. and Larcker, D. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Fuller, C.M., Simmering, M.J., Atinc, G., Atinc, Y. and Babin, B.J. (2016), "Common methods variance detection in business research", *Journal of Business Research*, Vol. 69 No. 8, pp. 3192-3198.

- Gambo, E., Mas'ud, A., Nasidi, M. and Oyewole, O. (2014), "Tax complexity and tax compliance in African self-assessment environment", *International Journal of Management Research and Review*, Vol. 4 No. 5, pp. 575-583.
- Hair, J.F., Hult, G.T., Ringle, C.M. and Sarstedt, M. (2017), A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), 2nd ed., Sage Publications, London.
- Hanefah, H.M.B.M. (2007), Tax Systems Taxpayer Compliance and Specific Tax Issues, Universiti Utara Malaysia Press, Sintok, Malaysia.
- Harman, H.H. (1976), Modern Factor Analysis, University of Chicago Press, Chicago, IL.
- Heikal, M. (2014), "The intention to pay zakat commercial: an application of revised theory of planned behavior", *Journal of Economics and Behavioral Studies*, Vol. 6 No. 9, pp. 727-734.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009), "The use of partial least squares path modeling in international marketing", New Challenges to International Marketing (Advances in International Marketing), Emerald Publishing Limited, Bingley, Vol. 20, pp. 277-319.
- Hoque, N., Khan, M.A. and Mohammad, K.D. (2015), "Poverty alleviation by zakah in a transitional economy: a small business entrepreneurial framework", *Journal of Global Entrepreneurship Research*, Vol. 5 No. 1, pp. 2-20.
- Idris, K.M. (2006), "The impact of perception of zakat law and enforcement towards the obedient behavior of zakat on income", *Journal of Ethics, Legal and Governance*, Vol. 2, pp. 32-41.
- Idris, K.M., Ali, E. and Ali, J. (2003), "The role of intrinsic motivational factors on compliance behavior of zakat on employment income", *Jurnal Pembangunan Sosial*, Vol. 6 No. 7, pp. 95-122.
- Idris, K.M., Bidin, Z. and Saad, R.A. (2012), "Islamic religiosity measurement and its relationship with business income zakat compliance behavior", *Jurnal Pengurusan*, Vol. 34, pp. 3-10.
- Joshanloo, M. (2017), "Islamic conceptions of well-being", in Estes, R. and Sirgy, J.(Eds). The Pursuit of Human Well-Being: The Untold Global History, Springer International Publishing, Switzerland, pp. 109-131.
- Kahf, M. (1983), "Taxation policy in an Islamic economy", in Ahmed, Z., Iqbal, M. and Khan, M.F. (Ed.), Fiscal Policy and Resource Allocation in Islam, International Center for Research in Islamic Economics, King Abdulaziz University, Jeddah, pp. 131-153.
- Kahf, M. (1999), "The performance of the institution of zakah in theory and practice", *International Conference on Islamic Economics Towards the 21st Century, Kuala Lumpur*, pp. 1-40.
- Keller, A.C., Smith, K.T. and Smith, L.M. (2007), "Do gender, educational level, religiosity, and work experience affect the ethical decision-making of US accountants?", Critical Perspectives on Accounting, Vol. 18 No. 3, pp. 299-314.
- Khamis, M.R. and Yahya, N.C. (2015), "Does law enforcement influence compliance behavior of business zakat among SMEs? A piece of evidence via the Rasch measurement model", Global Journal Al Thaqafah, Vol. 5 No. 1, pp. 19-32.
- Kirchler, E., Niemirowski, A. and Wearing, A. (2006), "Shared subjective views, intent to cooperate and tax compliance: similarities between Australian taxpayers and tax officers", *Journal of Economic Psychology*, Vol. 27 No. 4, pp. 502-517.
- Krejcie, R.V. and Morgan, D.W. (1970), "Determining sample size for research activities", *Educational and Psychological Measurement*, Vol. 30 No. 3, pp. 607-610.
- Majeed, M.T. (2019), "Real wellbeing of the ummah and economic performance: Islamic perspectives and empirical evidence", *Pakistan Journal of Applied Economics*, Vol. 29 No. 1, pp. 1-13.
- Milliron, V.C. (1985), "A behavioral study of the meaning and influence of tax complexity", Journal of Accounting Research, Vol. 23 No. 2, pp. 794-816.

- Mohdali, R. and Pope, J. (2014), "The influence of religiosity on taxpayers' compliance attitudes: empirical evidence from a mixed-methods study in Malaysia", *Accounting Research Journal*, Vol. 27 No. 1, pp. 71-91.
- Muhammad, S.A. and Saad, R.A. (2016), "Impact of attitude toward zakat evasion and moral reasoning on the intention to pay zakat: a pilot study", *International Journal of Research in Business Management*, Vol. 4 No. 2, pp. 59-64.
- Nazri, F.A.A., AbdRahman, R. and Omar, N. (2012), "Zakat and poverty alleviation: roles of zakat institutions in Malaysia", *International Journal of Arts and Commerce*, Vol. 1 No. 7, pp. 61-72.
- Peng, D.X. and Lai, F. (2012), "Using partial least squares in operations management research: a practical guideline and summary of past research", *Journal of Operations Management*, Vol. 30 No. 6, pp. 467-480.
- Pew Research Center (2017), "Why Muslims are the world's fastest-growing religious group", available at: www.pewresearch.org/fact-tank/2017/04/06/why-muslims-are-the-worlds-fastest-growing-religious-group/ (accessed 2 February 2019).
- Podsakoff, P.M., Mackenzie, S.B., Lee, J. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Powell, R. (2009), "Zakat: drawing insights for legal theory and economic policy from Islamic jurisprudence", *Pittsburgh Tax Review*, Vol. 43 No. 7, pp. 43-101.
- Richardson, G. (2006), "Determinants of tax evasion: a cross-country investigation", *Journal of International Accounting, Auditing and Taxation*, Vol. 15 No. 2, pp. 150-169.
- Richardson, M. and Sawyer, A. (1998), "Complexity in the expression of New Zealand tax laws: an empirical analysis", *Australian Tax Forum*, Vol. 14 No. 3, pp. 325-360.
- Saad, R.A. and Haniffa, R. (2014), "Determinants of zakah (Islamic tax) compliance behavior", *Journal of Islamic Accounting and Business Research*, Vol. 5 No. 2, pp. 182-193.
- Sareye, J.M. and Haji-Othman, Y. (2017), "The influence of attitude, subjective norms and service quality on the intention to pay business zakat among single business owners at Kuala Ketil, Malaysia", *International Journal of Novel Research in Humanity and Social Sciences*, Vol. 4 No. 1, pp. 100-107.
- Sareye, J.M., Haji-Othman, Y. and Omar, M.M. (2017), "The influence of attitude, religiosity, and perception towards law enforcement on intention towards compliance behavior of income zakat among KUIN staff in Kedah, Malaysia", *International Journal of Muamalat*, Vol. 1 No. 1, pp. 25-45.
- Slemrod, J., Blumenthal, M. and Christian, C. (2001), "Taxpayer response to an increased probability of audit: evidence from a controlled experiment in Minnesota", *Journal of Public Economics*, Vol. 79 No. 3, pp. 455-483.
- The General Directorate of Zakah Obligations (GDZO) (2016), Annual Report of Zakah Resources, GDZO Central Office, Sana'a, Yemen.
- Torgler, B. (2006), "The importance of faith: tax morale and religiosity", *Journal of Economic Behavior and Organization*, Vol. 61 No. 1, pp. 81-109.

# Corresponding author

Saeed Awadh Bin-Nashwan can be contacted at: s.nashwan233@gmail.com