



Contents lists available at ScienceDirect

## Emerging Markets Review

journal homepage: [www.elsevier.com/locate/emr](http://www.elsevier.com/locate/emr)



# Religion and ratio analysis: Towards an Islamic corporate liquidity measure



Ahmed M. Elnahas<sup>a</sup>, M. Kabir Hassan<sup>b,\*</sup>, Ghada M. Ismail<sup>c</sup>

<sup>a</sup> College of Business and Technology, Eastern Kentucky University, 521 Lancaster Avenue #137, Richmond, KY 40475, United States

<sup>b</sup> Department of Economics and Finance, University of New Orleans, New Orleans, LA 70148, United States

<sup>c</sup> Fogelman College of Business and Economics, The University of Memphis, 3675 Central Avenue #437, Memphis, TN 38152, United States

### ARTICLE INFO

#### Article history:

Received 1 March 2016

Received in revised form 7 August 2016

Accepted 14 September 2016

Available online 30 September 2016

#### Keywords:

Islamic finance

Ratio analysis

Corporate liquidity

Bankruptcy

### ABSTRACT

This paper contributes to the emerging literature on the effect of religion on corporate decision making and financial reporting. Financial statement analytical tools could violate several commands of Islamic law. Specifically, traditional liquidity ratios imply undervaluation, uncertainty, and interest bearing aspects that are strictly prohibited in Islamic law. We propose an Islamic-compliant measure of corporate liquidity. In order to validate our proposed ratio as a measure of corporate liquidity, we incorporate it in the traditional corporate bankruptcy prediction models. Our measure significantly improves the accuracy of the corporate bankruptcy prediction models of Altman (1968) Z-score and Ohlson (1980).

© 2016 Elsevier B.V. All rights reserved.

## 1. Introduction

Recent years have observed an increasing interest in the effect of religion on corporate decision making. Religion is found to affect innovation (Adhikari and Agrawal, 2016a), risk-taking profile (Jiang et al., 2015; Adhikari and Agrawal, 2016b), and inter-state alliance activities (Shi and Tang, 2015).<sup>1</sup> Further, several studies investigate the effect of religion on financial reporting. For example, Conroy and Emerson (2004) and Longenecker et al. (2004) show that highly religious individuals are less likely to view accounting manipulation as an acceptable practice. More recently, McGuire et al. (2012) find a negative association between religiosity and financial reporting irregularities.

\* Corresponding author.

E-mail addresses: [ahmed.elnahas@eku.edu](mailto:ahmed.elnahas@eku.edu) (A.M. Elnahas), [mhassan@uno.edu](mailto:mhassan@uno.edu) (M.K. Hassan), [gismail@memphis.edu](mailto:gismail@memphis.edu) (G.M. Ismail)

<sup>1</sup> See also Weber (1905), Putnam (1993), Landes (1998) Stulz and Williamson (2003), Barro and McCleary (2003), and Guiso et al. (2003).

Further, over the past two decades, there has been active research on Islamic finance. This research, however, is predominated by studies on Islamic banking (Bashir, 1983; Ongena and Şendeniz-Yüncü, 2011; Beck et al., 2013; Baele et al., 2014) and Shariah-compliant stock and fund returns (Derigs and Marzban, 2009; Bialkowski et al., 2012; Abdelsalam et al., 2014). Because of data limitations, there has been a severe shortage in studies on Islamic corporate finance, Islamic financial reporting, and Islamic financial statement analysis (Elnahas et al., 2016). The idea that religious (Islamic) teachings might have an impact on financial statement analysis stems from Gibson (2012) who states that “Financial statement analysis is a judgmental process” and Connolly (1999) who argues that religious beliefs and connotations “color all judgments” people make in their lives. This judgmental nature of financial statement analysis raises an important question of how religious teachings in general and Islamic commands in particular could affect the broadly accepted financial statement analytical tools and practices.

In this paper, we argue that some financial statement analytical tools might violate teachings of Islam. Specifically, the traditional measures of corporate liquidity impose undervaluation, uncertainty, and interest, while estimating the value of firms’ liquid assets. We show that these aspects violate several commands of Islamic law. Further, we propose an alternative measure of corporate liquidity that is more compliant with Islamic law. Our claims about the Islamic law-compliance of the proposed measure were developed theoretically. However, claiming that our proposed measure is indeed an accurate representation of corporate liquidity requires a validation test. In order to validate our proposed measure as a liquidity ratio, we replace liquidity ratios used in the bankruptcy prediction models of Altman (1968) and Ohlson (1980) with our proposed ratio.

For bankruptcies from 1980 to 2013, our results show that the use of the proposed liquidity ratio enhances the predictability power of the Ohlson (1980) logistic regression model. The proposed ratio has significantly higher differentiation capabilities between bankrupt and non-bankrupt firms. These results are stronger when firm characteristics are measured two years before bankruptcy. The proposed measure also enhances the predictability power of the Altman (1968) Z-score. Models that use the proposed ratio experience larger divergence between average Z-scores of bankrupt firms and non-bankrupt firms. For example, for the model that is predicted using one year of pre-bankruptcy data and the proposed liquidity measure, bankrupt (non-bankrupt) firms have a  $-1.43$  ( $0.25$ ) average Z-score. This difference is significantly higher than that for models using traditional liquidity measure. For those models, bankrupt (non-bankrupt) firms have a  $-0.56$  ( $0.09$ ) average Z-score. Further, the model that uses the proposed liquidity measure has 16% and 34% type I and type II errors, respectively. This misclassification is significantly lower than those reported for the traditional model which has 29% and 42% type I and type II errors, respectively. We conduct several robustness checks to our bankruptcy prediction results. Our validation test results are robust to including year and industry fixed effects, excluding financial and regulated firms, and are consistent over different sample subperiods.

It is worth noting that, although the proposed ratio is expected to be adopted mainly by Islamic users, we don’t claim that the benefits of using this ratio is user-specific. I.e., if the proposed ratio is actually a good measure of corporate liquidity as our empirical tests imply, it should benefit both Islamic and non-Islamic users, and, more importantly, it should benefit them equally.

This paper contributes to several areas of literature. First, it contributes to the literature on the association between religion and economy (Conroy and Emerson, 2004; Longenecker et al., 2004; McGuire et al., 2012; Jiang et al., 2015; Shi and Tang, 2015; Adhikari and Agrawal, 2016a, 2016b). Specifically, it gives insight on the possible channels through which religion could affect financial statement analysis. Second, it contributes to the emerging literature on Islamic finance (Bashir, 1983; Derigs and Marzban, 2009; Ongena and Şendeniz-Yüncü, 2011; Bialkowski et al., 2012; Beck et al., 2013; Baele et al., 2014; Abdelsalam et al., 2014). Specifically, we provide insight on how broadly accepted financial statement analytical tools could violate the commands of Islamic law. Further, we propose an Islamic-compliant liquidity measure that could be safely used by Islamic-compliant institutions. Third, this paper contributes to the literature on measuring corporate liquidity (Gitman, 1974; DeAngelo et al., 2002; Gryglewicz, 2011). Specifically, we propose a measure of corporate liquidity that is intuitively appealing and that might be used to complement existing measures. Finally, our empirical results contribute to the literature on predicting corporate bankruptcy using financial ratios (Altman, 1968; Ohlson, 1980; Almamy et al., 2016). Our results show that the proposed measure can help enhance the predictability power of these models.

The remainder of this paper is organized as follows: Section 2 provides review of the related literature and develops our liquidity ratio; Section 3 summarizes data and methodology; Section 4 Presents analysis and results as well as robustness tests; and Section 5 concludes.

Download English Version:

<https://daneshyari.com/en/article/5063029>

Download Persian Version:

<https://daneshyari.com/article/5063029>

[Daneshyari.com](https://daneshyari.com)