Journal of Corporate Finance xxx (2016) xxx–xxx

Contents lists available at ScienceDirect

Journal of Corporate Finance

journal homepage: www.elsevier.com/locate/jcorpfin

Can Islamic injunctions indemnify the structural flaws of securitized debt?

M. Shahid Ebrahim [a,*], Aziz Jaafar [b], Fatma A. Omar [c], Murizah Osman Salleh [d]

[a] University of Durham, UK
[b] Bangor University, UK
[c] Institute of Finance Management, Tanzania
[d] Bank Negara Malaysia (Central Bank of Malaysia), Malaysia

ARTICLE INFO

Article history:
Received 13 January 2015
Received in revised form 3 January 2016
Accepted 4 January 2016
Available online xxxx

JEL classifications:
D53
G10
G20
G28
O16
Z12

Keywords:
Agency cost
Collateral
Debt default
Financial fragility
Islamic injunctions

ABSTRACT

Securitization enhances liquidity of debt contracts. However, its structural deficiency at origination has led to the freezing of its secondary market and failure of institutions holding the collateral. This paper builds on key cultural (i.e., Islamic) rulings to rectify flaws entrenched in securitized debt stemming from asymmetric information and agency issues. These injunctions help in the efficient underwriting of debt contracts across the globe to: (i) redeem its 'toxicity'; (ii) guarantee liquidity; (iii) alleviate fragility of the financial system; and (iv) promote economic growth. Finally, this study promotes a rethink of the current 'Islamic' financial system from a narrow literalist juridical perspective to one that is grounded in financial economics.

"*Improving the liquidity of the bond market is now the number one item on the asset management industry's agenda*". Foley (2014b, p. 13).

1. Introduction

Securitization is assailed in the recent financial crisis. The opacity caused by complex collateralisation structures and the endemic agency issues of debt securities, is believed to have instigated the crisis (Gorton and Metrick, 2012). This is despite the viability of securitization in enhancing liquidity for firms' receivables (Cohn, 1998); and facilitating banks' balance sheet restructuring, funding and other risks management activities (Loutskina, 2011).

* Corresponding author at: Durham University Business School, Mill Hill Lane, Durham DH1 3LB, United Kingdom. Tel.: +44 191 334 5405.
E-mail address: m.s.ebrahim@durham.ac.uk (M.S. Ebrahim).

http://dx.doi.org/10.1016/j.jcorpfin.2016.01.002
0929-1199/

Demyanyk and Van Hemert (2011); Heilpern et al. (2009), and Shin (2009) assert that securitization is not entirely blamed for the crisis. The desire to increase the supply of loans is the prime reason, leading to lax underwriting standards and consequently liquidity freeze. Essentially, banks failed to efficiently price their lending facilities to be default free (Ebrahim and Mathur, 2007). Apart from accounting for the traditional repercussion of interest rate risk on demand and supply of loans, banks have ignored the effect of collateral value resilience to economic shocks.

The purpose of this paper is to elaborate on how cultural, that is values emanating from Islamic rulings can help alleviate the structural flaws behind securitization of debt, thereby mitigating the fragility of the financial system and facilitating economic growth.[1] Our goal is to coherently interpret the Islamic rulings[2] from a financial and economic perspective, and apply the doctrines to improve the resilience of the financial sector of the economy.

This paper studies the contractual relationship between risk-averse lenders and borrowers in a stylized setting. We proceed with examining the main issues in financial contracting, namely asymmetric information and agency costs of debt separately and offer solution to this quandary premised on techniques espoused in the established literature.[3]

A viable and economically efficient securitization option emphasized in this paper is to structure default-free loans completely collateralized by tangible assets to curtail risk-shifting, accompanied with measures to curtail underinvestment issues. Firstly, we interpret the Islamic rulings from both financial and economic perspective, and employ them in structuring securitized debt claims ensuing from tangible collateral to ensure that information asymmetry is mitigated. In other words, we conceptually model the tradeoff of financial claims of a project involving *tangible* assets. This constitutes a framework of Rational Expectations (i.e. *symmetric* information).[4] Secondly, we emulate the model of Ebrahim et al. (2014) to illustrate: (i) the economic efficiency of default-free securitization over default-prone one; and (ii) the mathematical condition yielding illiquidity for default-prone debt, as evidenced in the recent crisis. Finally, we rationalize the verses of the Qur'ān to meticulously price debt by alleviating the agency cost of debt.

Our efforts yield the following contributions to the literature. First, our approach of segregating the twin issues in financial contracting on information asymmetry and agency cost of debt differs from present literature which regards the first issue to subsume the second (Koziol and Lawrenz, 2010; Salleh et al., 2014). Second, the Arabic nomenclature contrasting tangible assets (‘*ayn*) (and claims backed by them) versus intangible assets (constituting of debt/obligation/liability – *dayn*) (and claims backed by them) helps in alleviating information asymmetry (*gharar*). By securitizing or ensuring the claims are backed by tangible assets, lenders would then have access to asset's historical (ex-post) risk and return, which enhances the risk exposure estimation. Adverse selection is moderated by financing the purchase of tangible assets where funds are released in the escrow process when title of the tangible asset changes hands. Moral hazard is also moderated by adhering to the Islamic rulings (Qur'ānic verse - 2:282) espousing clear, concise, complete and correct documentation of deferred claims. This facilitates the underwriting of financial facilities in a complete market setting spanning each state of the economy.

Third, we adapt the Lucas tree model (Martin, 2013) to mathematically rationalize the Islamic rulings on: (i) the prohibition of *ribā* (debilitating exchange of financial claims elaborated in Section 4); and (ii) injunction of the sale of debt (*bay' al-dayn*). These respectively forewarn against investing in toxic asset, and stem the degeneration to a default-prone debt equilibria wrought by illiquidity, as evidenced in the crisis.

Fourth, the Islamic rulings emphasizing: (i) fragile-free financial contracting (Q 2:280); (ii) risk management (Q 4:71, 102); and (iii) judicious undertaking of obligations (including that of debt, Q 5:1) help alleviate the agency cost of debt. This is because efficient pricing of facilities at origination, sterilizes the borrower's put option to default during the tenure of the credit facility. This indemnifies the facility of the risk-shifting (i.e., agency) issue and subsequently reduces the funding constraints on borrowers to mitigate the underinvestment issue. This leads to default-free financing, which maintains the value of collateral, ensures liquidity of current and future obligation, and leads to stable financial system that is beneficial to financial market participants. Thus, arresting the fragility of the financial system rejuvenates economic growth.

Finally, our study stimulates a fresh financial economic perspective from the existing narrow interpretation of Islamic scholars that is crucial in advancement of legal, informational and financial infrastructure to alleviate the perennial underdevelopment of emerging Muslim economies.

The remainder of this paper is organized as follows. Section 2 reviews the merits and shortcomings of securitization. Section 3 discusses securitization in Muslim economies. Section 4 rationalizes the cultural perspective behind the trading of financial claims and addresses the deficiencies of securitization. This includes the mitigation of asymmetric information by securitizing only claims backed by real tangible assets, and agency cost of debt by meticulously pricing debt at origination thereby moderating both risk-shifting as well as under-investment. Finally, Section 5 concludes the paper.

[1] Our paper is consistent with the views of Stulz and Williamson (2003), Li et al. (2013) and Lievenbrück and Schmid (2014), who emphasize the impact of culture (including values extracted from religious scriptures) on economic policies and institutions.

[2] This is guided by the Islamic scriptures, namely the *Qur'ān* (Muslim Holy Book) and the *Sunnah* (traditions of Prophet Muhammad).

[3] Our approach is akin to published articles of scholars who focus on wealth effects of important events, in leading economics and finance journals (see Berkowitz et al., 2015). Yet, their methodology is an adaption of the event study formulated in the well-known Fama (1991) paper pertaining to the efficiency of financial markets.

[4] Rational expectations is defined as "*the application of the principle of rational behavior to the acquisition and processing of information and to the formation of expectations*" (Maddock and Carter, 1982, p.41). It is '*self-fulfilling*' in the sense that the economic agents form correct expectations, given the pricing model and information (Bray, 1981).

Please cite this article as: Ebrahim, M.S., et al., Can Islamic injunctions indemnify the structural flaws of securitized debt? J. Corp. Finance (2016), http://dx.doi.org/10.1016/j.jcorpfin.2016.01.002