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Market segmentation and non-uniform Shariah standards in Islamic finance☆

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ABSTRACT

This paper proposes a new answer to a controversial paradox in Islamic finance described by El-Gamal (2002): "despite the long development of uniform standards for Islamic finance, the market remains largely segmented." We explain market segmentation as a separating equilibrium in which finance premiums serve as a socially beneficial (although costly) signaling mechanism. Market segmentation under a uniform standard of Shariah-compliance occurs when the Shariah Boards of two Islamic Finance Institutions (IFIs) use different degrees of stringency even though they agree on a common set of minimum requirements to comply with Shariah Law. Heterogeneous degrees of stringency chosen by different IFI Shariah Boards translate into different premiums paid by different customers. One IFI targets the moderately pious consumer segment while the other targets the highly pious segment. The IFI that targets highly pious consumers voluntarily offers a more limited set of investments and financing products. By allowing for multiple Muslim communities with distinct group identities and correspondingly variable willingness-to-pay to signal piety types, the model provides an explanation for market segmentation.

1. Introduction

El-Gamal (2002) describes four related paradoxes in Islamic finance (IF). The first is the substantial gap between economic theory and the observed IF product offerings or consumer behavior. Second, the IF market remains largely segmented. Despite longstanding attempts to develop uniform standards, the Shariah-compliance polices observed across the industry are markedly heterogeneous, implying that there is no accepted uniform standard in practice.

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Third, the number of active jurists is relatively small, so that the same jurists frequently serve on multiple Shariah Boards. From this substantial overlap of the religious scholars who sit on different Boards, substantial overlap might be expected among those Boards' juridical interpretations. Fourth, he notes various debates and open questions regarding the number of widely used financial contracts approved by Islamic jurists which have come under sharp criticism for being overused.

Our paper focuses primarily on the second paradox where El-Gamal (2002) provides an answer for the paradox of market segmentation. He suggests that different speeds of innovation between incumbents and new entrants could explain why segmented product offerings are observed—based on different judgments by Shariah Boards at different Islamic Financial Institutions (IFIs) even though there is general agreement on the legal standard that should be applied.

We propose an alternative complementary explanation by showing that market segmentation can also arise as a natural consequence of screening by IFIs.[3] This paper describes a game situation in which IFIs set different Shariah-compliance policies which determine the premiums above the cost of using non-IF products. In this game, a continuum of customers seeking financial services makes decisions about which bank or financial institution to patronize. The decision is to: (i) forgo paying any IFI's premium and instead deal with a conventional financial institution; (ii) bear the moderate cost of a relatively permissive IFI; or (iii) bear the high cost of the strictest IFI. This decision over financial institutions depends on each agent's piety type (low, moderate, or high), which is known to oneself but not observable to others.

Given one of these three piety types, the consumer's decision depends on the heterogeneous mix of other consumers' financial profiles that determine each individual's cost of conventional finance. The heterogeneity of different agents' non-IFI options generates a continuum of reference points against which the competing Shariah-compliance policies generate a continuum of IF premiums. Agents weigh the benefits of signaling their own piety type to other agents (by choosing to pay an IF premium) against its cost. Although the model includes only two distinct Shariah-compliance policies set individually by each IFI, each of these two policies respectively generates a continuum of opportunity costs (and, consequently, variable utility gains from agents' decisions about how to signal their piety type). Therefore, the decision to become an IF client transmits different information depending on an individual's non-IFI option, capturing an important real-world driver of heterogeneous consumer behavior and heterogeneous strategic marketing decisions by IFIs.

Berg and Kim (2014) demonstrate that IF premiums can provide a beneficial signaling technology even in the absence of any direct benefits (intrinsic or otherwise) received by agents who choose to become IF clients. What is new in this paper is its focus on two competing IFIs that strategically decide on the stringency of their Shariah-compliance policies. In line with El-Gamal's (2002) description of "market segmentation," the choice variables of the competing IFIs in our model are scalar-valued degrees of stringency corresponding to each IFI's Shariah-compliance policy, which emerges as a strategic marketing tool that presupposes no essential disagreement among Shariah Boards.

The set of Shariah-compliant points in the universe of existing financial securities is a strict subset of the unrestricted universe of feasible risk-return combinations provided by conventional finance. Therefore, the IF premium can be interpreted in units of forgone expected return (which includes premiums paid for debt financing, or as any short position obligating an IF customer to make future payments) while holding volatility constant.[4] All else equal, a more stringent Shariah-compliance policy implies greater forgone expected return at every fixed level of volatility. This risk-invariant decrease in expected returns that any IF client faces (e.g., on a home purchase, a retirement portfolio, an insurance policy, or a small business investment) is equivalent to paying higher prices for financial services, referred to here as the IF premium. This modeling technique deliberately abstracts from any intrinsic benefits derived from adhering to Shariah-compliant financial contracts. Such intrinsic motivation complements the mechanism demonstrated in this paper that rationalizes segmentation into differentiated products offered by IFIs. Our model assumes away these intrinsic benefits to isolate the signaling and reputational effects. El-Gamal (2002) and others have pointed out these may be substantial. Alternatively, some critics suggest interpreting exposure to IFIs as a net social cost (e.g., Khan, 2010). Our abstraction from intrinsic benefits or costs provides a thought experiment focused on signaling and its role in explaining the emergence of market segmentation.

Section 2 discusses market segmentation in the Islamic finance industry that motivates the theoretical model. The model is described in Section 3. The equilibrium analysis appears in Section 4 followed by a conclusion in Section 5.

2. Market segmentation and positioning of IFIs

2.1. Economics of piety

Azzi and Ehrenberg (1975) decompose religiosity into three main components: a salvation motive that captures the idea of afterlife utility; a consumption-of-religious-experience motive, which refers to utility gained directly from going to church and indirectly by participating in religious and non-religious activities with other church members; and a social-pressure

[3] We follow El-Gamal (2002) in assuming that there are exogenously given piety types. Our explanation does not require a face-value interpretation of piety types. The piety types referred to here (e.g., high, moderate and low) can be interpreted simply as distinct Muslim communities with different views about what it means to be pious.

[4] Along every constant-volatility vertical segment that passes through the larger non-IFI bullet (encompassing the unrestricted universe of feasible risk-return pairs using conventional finance) and the smaller bullet offered by the IFI measures a vertical distance between these two bullets in units of forgone expected return. Illustrations of different-shaped risk-return bullets corresponding to IFI and non-IFI sectors can be found in Berg and Kim (2014).