The Economics of 21st Century Islamic Jurisprudence

Mahmoud A. El-Gamal [*]

Abstract

The recent history of Islamic finance is riddled with a number of paradoxes. First, there is a great rift between the economics literature on Islamic finance, and the practical approaches taken by financial experts and practitioners in the area. Second, despite two or more decades of rhetoric regarding the development of uniform standards for Islamic finance, the market remains largely segmented. Third, despite the many juristic questions that are being raised by financial experts and practitioners, there are very few active jurists in the area. Fourth, while those jurists have approved a number of new financial contracts that are extensively used in the Islamic finance industry, those same jurists have consistently criticized the overuse of those same contracts that they have declared to be Islamically permissible (e.g. *Mur baha*). I present a simple economic model to explain all four paradoxes.

I. Which "Islamic Finance"?

Most observers of the Islamic Finance movement over the past two decades will acknowledge (and perhaps lament) the great rift between the early and current literature on "Islamic Economics" on the one hand, and the reality of Islamic Finance on the other. In this regard, I would like to present a simple explanation of this difference. To make my analysis clear, I shall use simple economic schematics to describe my views. The diagrams in the remainder of this section have two axes, labeled "efficiency" and "equity". The fundamental tradeoffs in any economic system are ones between such considerations of efficiency (the size of the economic pie to be shared by economic agents) and equity (how justly, and how equally, the pie shares are determined). Our simple model is comprised of three main components:

1. **Preferences**: First, we consider the preferences of jurists, which are interpreted as manifestations of their understanding of the Objectives of Islamic Law (*Maq sid al-Shar ᶜah*). As shown in Figure 1, those preferences are assumed to be relatively flat, i.e. giving a higher weight to considerations of equity (*al-ᶜadl*) relative the weight given to considerations of economic efficiency (*al-kaf 'ah al-'iqtis diyyah*). In contrast, it is assumed that the preferences of bankers and other economic agents are more biased towards considerations of efficiency relative to those of Islamic jurists. Hence, the latter preferences are drawn more vertical than the former.
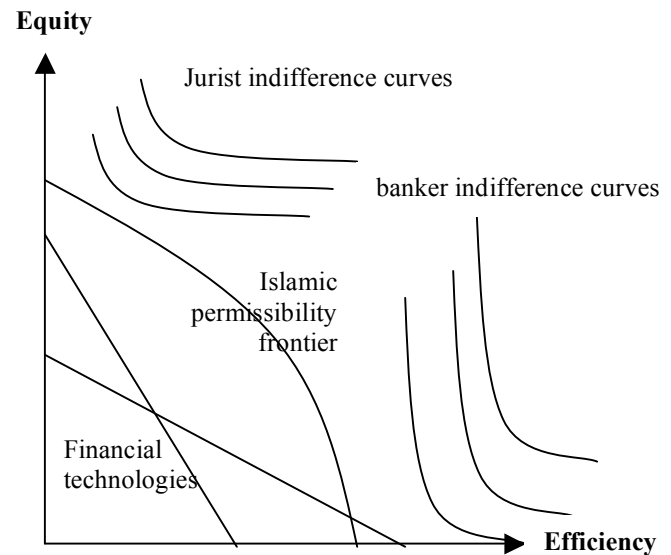

Figure 1

Equity

Jurist indifference curves

banker indifference curves

Islamic permissibility frontier

Financial technologies

Efficiency

2. **Financial technologies**: Those are institutional frameworks that render certain types of contracts and transactions feasible. Each technology allows for linear tradeoffs between efficiency and equity by simply allowing for redistribution schemes.

3. ***Shar ᶜah* boundary**: The Islamically permissible set of allocations is drawn as a convex set, with an "Islamic permissibility frontier". Convexity follows from the fact that if two points are permissible, any convex combination thereof is permissible. For instance, if it is permissible to perform all transactions according to *Mur baha*, and it is permissible to perform all of them according to *Mud raba*, then performing half as one and half as the other must also be permissible. The set contains the origin, corresponding to no transactions taking place, and its boundary is drawn as a "permissibility frontier".

We may now motivate the question posed by the title of this section: which Islamic finance? The line **AA** in Figure 2 represents the current financial technology, which evolved over the past few centuries. Since this technology evolved in response to the secular financial needs of economies worldwide, it tends to cater to the secular/banker preferences, thus producing the status quo tangency point **Q**, in the Southeast part of the Figure, which affords society a high level of economic efficiency, at the expense of having very low levels of socio-economic equity.

The Islamic economics literature, in contrast, aims to describe and analyze the point that is optimal to Islamic jurists, that is the tangency point **E** in the Northwest region of Figure 2. After more than half a century, this literature has failed to develop a coherent and effective financial Islamic system, since the evolution of a financial technology that goes through their favorite point **E** requires many more decades of trial and error. For instance, the existing financial technology represented by the point **Q** evolved over a period of six or more centuries. Recognizing the difficulties surrounding the of development of a financial technology that passes through the ideal point **E**, many Islamic economists and some practitioners in Islamic finance turned to point **D**, at which the jurist preferences are maximized subject to the financial

Figure 2

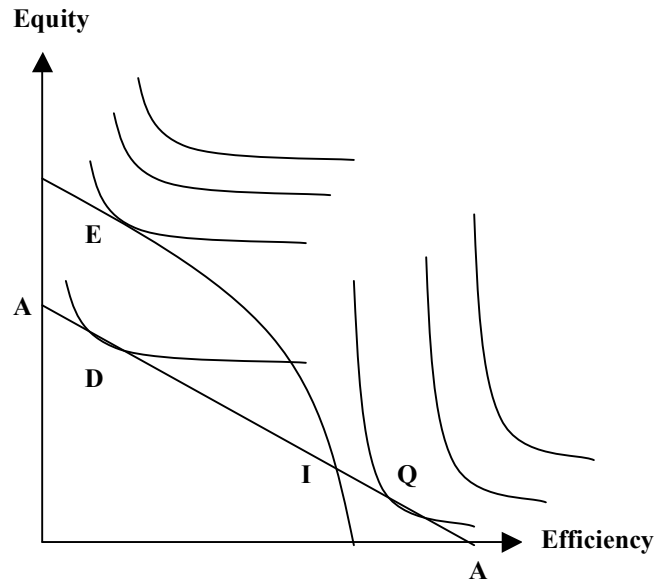technological constraints currently in existence. Unfortunately, since this point is interior to the permissibility frontier, it is easily viewed by theoreticians and practitioners as socially inefficient. Thus, while those who attempt to use interest-free loans and other Islamically permissible contracts for poverty alleviation play a qualitatively important role, their approach cannot possibly be successful in developing an Islamic finance industry.

Thus, when Muslim bankers and newcomers to the field started developing an Islamic finance industry, it was clear "which Islamic finance" they would pick: Point **I**, at the intersection of the current financial technology and the permissibility frontier is sufficiently close to point **Q** that they could draw on conventional financial industry skills to develop the new industry. Moreover, identifying the types of Islamically permissible contracts that produce point **I** was relatively easy to accomplish. The Islamic Jurisprudence institution of *Fatw* and *Istift '* (the issuance and solicitation of Juristic opinions, respectively) is particularly suitable for financial practitioners to solicit opinions regarding small modifications of existing financial contracts commonly used to provide point **Q**, and Jurists can then provide qualified "yes" or "no" answers. In this sense, point **I** represents "the closest permissible point subject to the current financial technology".

We can now understand the three incompatible views we find in the Islamic finance and economics literatures. Those who are writing about point **E** address the problems of a theoretical society imbued with the values of Islam, and promote their visions of a very different financial system with a heretofore unknown set of instruments, that will produce justice for humankind (a paradigm shift). Second, those who are writing about or implementing point **D** emphasize finding practical (i.e. conventional) solutions for the lack of socio-economic equity in our current system. Finally, those whose voice has become loudest, since it is backed by relatively massive profit-and-efficiency-seeking financial assets, as well as many decades of experience in the conventional financial sector, are mainly talking about point **I**. In fact, this last trend has grown so significantly in the past two decades, that it has become necessary to associate the term "Islamic finance" exclusively with this "closest permissible point" approach, represented by point **I** in Figure 2. Those who insist on the superiority of point **E** have been derided as "ultra-theoretical" and "dogmatic", and the title of Islamic finance has been *de facto* withdrawn from their research efforts. In the meantime, those who are focusing on point **D** have to some extent been adopted by the Islamic finance industry, given a minimally effective but significant public relations role to add more credibility to the "Islamic" label which puts more emphasis on equity than point I can provide.

II. How close is too close? The paradox of criticizing one's own work

We now turn to the last paradox listed in the abstract. There is no doubt that jurists prefer point **D** to point **I** (by construction, point **D** is a point of tangency of Jurist preferences with the **AA** line, while point I will fall on a lower indifference curve). Therefore, when asked whether or not point **I** is permissible, they are happy to issue the opinion that it is permissible, and more than happy to encourage the adoption of point **I** instead of the forbidden contracts that are associated with point **Q**. However, most of them view the adoption of point **I** as a interim solution that is part of an Islamization process that will ultimately produce an "ideal" Islamic financial system. For instance, numerous jurists refer to the principle of *Al-Kharj bi-l-Damn* (return must be commensurate with risk) to argue that explicit risk-sharing arrangements (such as partnerships) are superior to guaranteed return contracts (such as the predominant use of deferred cost-plus sale financing). While I would argue that reliance on this principle for this argument illustrates the jurists' lack of understanding that the issue is truly a tradeoff of one type of risk sharing for another (credit financing still exposes the bank to credit risk, which is characterized by a small probability of a large loss, whereas direct risk sharing results in a more continuous distribution of potential losses), it is nonetheless true that jurists seem to be leaning more towards points **D** and **E**. In fact, since point **E** is unattainable given the current financial technology (or any we can readily imagine), the Islamic financial movement adopted point **D** partially to appease Jurists who insist that Islamic financial institutions need to engage in such equity enhancing transactions.

The problem gets much more interesting once we take a closer look at "point" **I**, and recognize that the boundary of permissibility is in fact fuzzy. For instance, in the contract of cost-plus sale financing, Jurists may and may not insist that an Islamic bank first purchase the financed item, and then sell it cost-plus with a deferred price to the customer. In the "two-contract" case, jurists may (and in fact do) differ in their prescriptions for the degree of guaranty the customer needs to offer the Islamic bank that he will purchase the item once the bank acquires it. There are also some recent opinions that have been voiced in the U.S. that due to tax considerations, the two-sale arrangement may be reduced to a single sale (which brings the *Murbaha* contract sufficiently close to traditional financing to make the two virtually indistinguishable in the eyes of some observers). Therefore, as shown in Figure 3, as we move from the
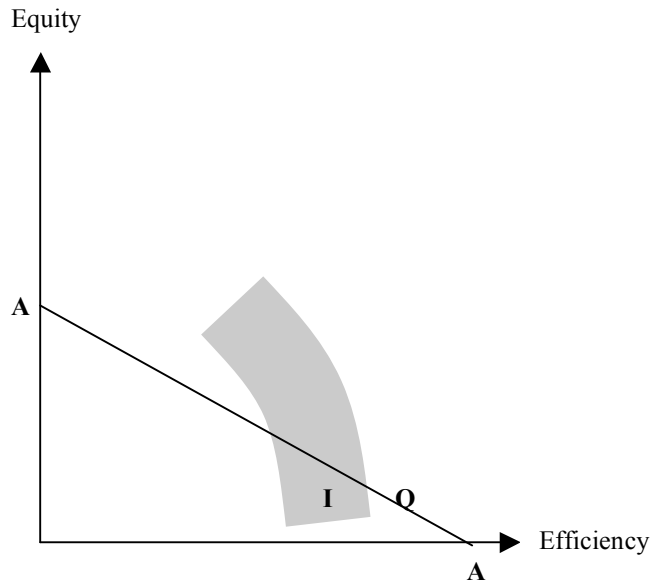

Figure 3

conventional finance model represented by point **Q**, we can pick any point along a *segment* (rather than point) **I** of potential "closest" Islamically permissible point, depending on juristic interpretation.

III. Multiple jurists, fuzzy boundary

In what follows, we shall model that line segment **I** in Figure 3 as the [0,1] interval on the real line, where point zero corresponds to the point on the segment that everyone agrees to be Islamically permissible, and point 1 corresponding to the other extreme. In our model, the credibility of a point along that segment will be a function of how conservative (closeness to zero) or innovative (closeness to one) it is, as well as the number of jurists who are active in the Islamic finance arena. In this regard, the point zero (most conservative interpretation, e.g. two separate sales with no promise in *Murᵃbaha*) always has maximal credibility (set to be one), and the point at the very edge falls under the category of "too close for comfort" (as the <u>Had</u><u>th</u> says "*ka-l-r ᶜ yah mu hawla l-him y shiku 'an yaqᶜa f h*"; like a shepherd getting too close to a pack of wolves). We shall therefore model the degree of credibility of any point along the segment
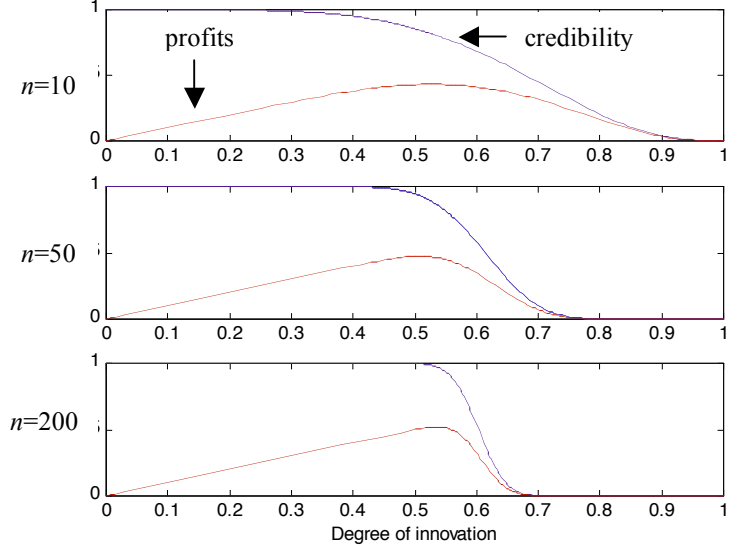

Figure 4

as one less a cumulative distribution function. Thus, credibility will be interpreted as the proportion of jurists supporting a particular degree of innovation. In what follows, we shall consider the industry with n active jurists, and we shall define the credibility of a point x in [0,1] as one less the Beta cumulative distribution function $F(x) = B(x|\alpha,\lambda)$ with parameters $\alpha=\pi n$, $\lambda=(1-\pi)n - 1$ (the graphs in this remainder of the paper are shown with $\pi = 0.6$, for illustration). The resulting credibility function has the interpretation of the proportion of jurists supporting the given level of innovation, given that the "correct" level of innovation to support is $0 < \pi < 1$. As the number of jurists gets large, the credibility function degenerates to one for all innovations below that correct level and zero for all innovations above it. On the other hand, the smaller the number of active jurists in the industry, the more uncertain is the location of that correct level of innovation, and the more room there will be for market segmentation, as we shall see shortly.

In figure 4, we plot the credibility function for various values of n, the number of jurists. We also plot the assumed profit function for a monopolist in Islamic finance. Normalizing profits from providing innovation level x to pious Muslims to be equal to x, and assuming that the proportion of such pious Muslims who will actually give their business to the Islamic finance monopolist with innovation level x to be equal to the credibility function $1-F(x)$, the monopolist's profit function at innovation level x will be *profit(x) = x (1-F(x))*.

IV. Multiple Islamic Finance firms: cooperation vs. competition

We now turn to the problem of how Islamic finance firms react to market conditions. The qualitative results can be illustrated with only two firms. Assume one firm is already providing Islamic financial services up to some level of innovation. The second firm can do one of three things:
1. The new firm can try to cooperate with the first firm, thus acting jointly as a monopolist, with the same level of maximal innovation, and sharing monopoly profits;
2. The new firm can decide to innovate further, thus obtaining a monopoly over the more innovative Islamic financial products, while gaining a small share of the less innovative product market, since its innovation level lowers its "Islamic" credibility;

3. The new firm can decide to challenge the incumbent firm, thus innovating less and undermining the incumbent firm's credibility by charging that it is innovating too much and getting too close to conventional finance.

In either of the last two cases, we have one firm innovating more than the other. Without loss of generality, let x_2 be the lower level of maximal innovation, and $x_1 > x_2$ be the higher level of maximal innovation. Then the profits of the more conservative firm 2 will be:

$$\pi_2(x_1, x_2) = x_2 \frac{(1 - F(x_2))^2}{2 - F(x_1) - F(x_2)}$$

while the profits of the more innovative firm 1 will be:

$$\pi_1(x_1, x_2) = x_2 \frac{(1 - F(x_1))^2}{2 - F(x_1) - F(x_2)} + (x_1 - x_2)(1 - F(x_1))$$

Given the two profit functions, we can derive each firm's best response to the other firm's level of innovation by calculating that firm's first order condition of profit maximization. Solving the two first order conditions simultaneously for the optimal x_1 and x_2, we obtain the Counot-Nash equilibrium to the competitive game where one firm innovates more than the other. We perform this equilibrium calculation for each number of jurists between 1 and 100, and plot the levels of innovation and profits of the innovator and conservative firms, as well as the level of innovation of the monopolist and each firm's share of monopoly profits for comparison.
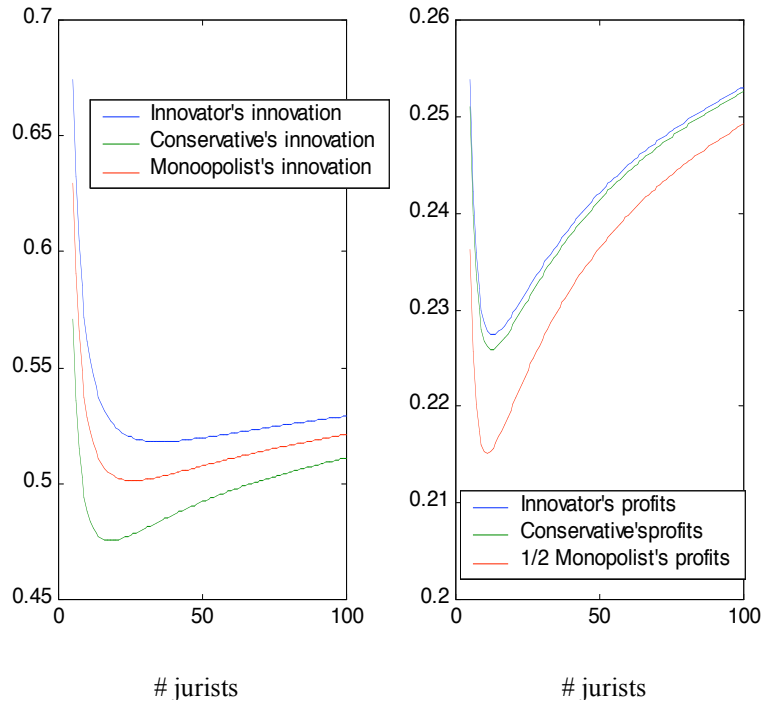

Figure 5

There are two main patterns to highlight in the results shown graphically in Figure 5, explaining the two remaining paradoxes that we highlighted in the abstract:

1. Compared to the monopolist level of innovation, one firm innovates more, and the other innovates less. As a result, the two firms divide the market, one appealing exclusively to the ultra-pious (the conservative firm), and the other appealing mainly to the relatively more "liberal" Muslim population that does not mind a high degree of similarity between Islamic and conventional financial products. As a result of the market segmentation (a form of price discrimination), both firms' shares exceed their share of the monopolist profits. In other words, overall industry profits increase, with the innovator holding a slight advantage, but both firms benefiting from the market segmentation. This suggests that even if there were only one monopolist in the Islamic finance market, he would still benefit from artificially splitting into two entities: one more conservative and the other more innovative. This also explains why, despite many years of continued rhetoric

regarding the establishment of uniform standards for Islamic financial products, the market remains segmented: All firms in the market benefit from this market segmentation!

2. The second most important trend can be observed by comparing the levels of innovation and profit as the number of jurists increases. Without any jurists, some providers may call themselves Islamic and provide very "innovative" labels for relatively conventional products.

   a. As few jurists start getting involved, the credibility of such firms drops very quickly, and they are forced to adopt much more conservative profiles, thus reducing their profits. Therefore, jurists have an incentive to get involved at this stage of development of the industry. Their intervention at this stage helps to reduce the level of innovation, thus bringing the industry away from point **Q** (conventional finance) and closer to points **D** and **E** (preferred by the jurists). This is in fact what happened in the early days of Islamic finance, when jurists' involvement put many heretofore non-existent restrictions on the sets of contracts that Islamic banks can give the Islamic label (especially, cost-plus and lease financing).

   b. However, as the number of jurists increases further, more credibility is lent to slightly more innovative practices. Therefore, if Islamic banks could not stop jurists from getting involved in the first place, it is in their best interest to get more of them involved, thus achieving moderate levels of innovation with increased credibility, and restoring profits to the level they would obtain without any jurists auditing their behavior. However, if this were allowed to continue, jurists' preferences will be compromised as their very participation lends more credibility to such increased innovations that move the industry back away from points **D** and **E** and towards **Q**. Therefore, after a small number of jurists participate in the industry to limit the degree of unwarranted innovation, it is in the best interests of all jurists that no more of them enter the industry. Hence, if jurists are attempting to increase equity and move to safer juristic grounds (away from **Q**), and if they act strategically – taking into account the reaction function of Islamic finance firms given the level of credibility their presence would lend the industry – they will keep the number of jurists who enter the industry relatively small. Therefore, we have explained the small number of active jurists in the industry, which is the remaining paradox mentioned in the abstract.

V. Concluding Remarks

I do not pretend to have any answers to the truly fundamental problem being posed by Figure 1: which Islamic finance should we strive to develop? Indeed, the answer to such a question would require a full understanding of the possibilities of developing entirely new financial structures, and/or developing a new and more sophisticated jurisprudence of financial transactions. The purpose of this brief essay/address was simply to allow us all to understand the current state of affairs in Islamic finance better. Unfortunately, as is the case with all economic reasoning, clarity of understanding can only be obtained at the expense of providing an overly stylized account of the relevant factors. I hope that, stylized as it may be, my analysis provides us sufficient clarity while maintaining enough relevance to the facts of Islamic finance. Such clarity of understanding is necessary if we are to achieve in clarity of direction for financial industry building and re-invigorating Islamic Jurisprudence of financial transactions with full understanding of the incentives, strengths, and weaknesses of all the parties who need to be involved in the journey ahead.