Incoherence of Contract-Based Islamic Financial Jurisprudence in the Age of Financial Engineering

Mahmoud A. El-Gamal
Rice University
May 2007

Abstract

Islamic financial jurisprudence has always had the stated aim of enhancing human welfare, and therefore prohibitions must be seen through the lens of welfare-enhancing regulation of financial practices. In today’s age of financial engineering, utilizing many of the legal and financial advances of the past two decades, it is quite easy to synthesize the contracts that classical and contemporary jurists forbade from the ones that they have permitted. This financial engineering approach was always possible to some extent, but recent advances have reduced transaction costs substantially. In premodern societies, when transaction costs of ruses to circumvent prohibitions were substantial, prohibitions could serve their intended regulatory purpose, albeit imperfectly. In today’s age of low-cost financial engineering, the regulatory substance of prohibitions, contract conditions, and other contract-based juristic rulings has been diluted to the point of rendering the contract-based jurisprudence incoherent.

I. Contract Form and Economic Substance in Islamic Finance

Over the past three decades, an industry has emerged under the name “Islamic Finance”, purporting to provide financial products and services in accordance with Islamic law or Shari’a. The focus of this industry has been on contract forms used in various financial transactions. For instance, instead of extending a mortgage loan to finance the purchase of real estate, an Islamic financial provider would buy the property first and then sell it on credit to the customer, often benchmarking the implicit rate of return on capital to prevailing mortgage rates.

Prohibition of certain types of financial transactions is not unique to Islam. The Jewish Halakhah plays the same legal role as the Islamic Shari’a. Of course, in financial affairs, the Hebrew Bible (Old Testament) contains one of the prohibitions commonly shared between Halakhah and Shari’a, namely the prohibition of interest-based lending. Many Rabbinic solutions were provided as premissible alternatives for interest-based lending. However, the Rabbinic prohibition was stricter than the Islamic, considering the

---

1 Hebrew Biblical prohibitions of interest-based lending can be found in Exodus [22:25], Leviticus [25:35-7], and Deutronomy [23:19-20], additional elaborations can be found in Bava Metzia, Chapter 5, Mishna 2. Qur’anic prohibitions can be found in [30:30, 3:130, and especially in 2:275-9], and many elaborations are provided in the Prophetic tradition and that of the earliest Muslim community.

increment in the price of a credit sale (above the cash price) to be forbidden interest.³ This is in stark contrast to Islamic jurisprudence, where the jurists of all major schools of jurisprudence have allowed charging a higher credit price than the cash price.⁴

The Jewish Rabbis ruled that a business is not allowed to charge two prices, a lower cash price and a higher credit price, “because someone who pays the higher price is actually paying an additional fee for credit. This is Ribbis”.⁵ On the other hand, there appear to be loopholes for some applications.⁶ The Rabbinc alternative of choice, however, appears to be the contract known as heter iska (investment contract), which may be customized for various purposes to recharacterize the interest as a profit share for the provider of capital.⁷ There is evidence that this contract has been used in the U.S., and that courts dismissed the religious-legal characterization of the contract as investment agency in favor of treating it as typical interest-based debt. Thus, in Barclay Commerce Corp. v. Finkelstein (1960) the Appellate Division of the New York Supreme Court ruled that the heter iska was “merely a compliance in form with Hebraic Law”, and cited that opinion again in its ruling in Arnav Industries, Inc. Employee Retirement Trust v. Westside Realty Associates (1992).⁸

There are two British decisions on the Islamic financial practice of murabaha (purchase followed by cost-plus credit sale) financing that parallel those two decisions in American courts regarding heter iska financing. In murabaha financing, the lender collects interest as a markup in the credit sale of some property over the cash price. In two cases that came before English courts (Islamic Investment Company of the Gulf v. Symphony Gems NV in 2002, and Beximco Pharmaceuticals v. Shamil Bank of Bahain EC in 2004) the customers of Islamic banks argued that the markup constituted interest on a loan, and therefore violated provisions in the contract that it would be governed by Islamic Shari’ah.⁹ In both cases, English courts reasoned that the Shari’ah was not the recognized

---

³ “The prohibition of Ribbis is not limited to situations where cash changes hands. It also applies to purchases made on credit. In this case the customer has the status of a borrower and is prohibited from paying interest on the credit that he owes the seller”, ibid., p.112. Rabbi Reisman proceeds to distinguish between the Canonical prohibition of interest on cash loans, directly taken from the Torah, and the prohibition of interest in credit sales, based on Rabbinic inference.

⁴ Classical jurists used phrases such as “price may be increased due to deferment”, and “time has a share in the price”, see Al-Misri, Rafic Yunus, Bay’ al-Taqsit: Tahlil Fiqhi wa Iqtisadi (Installment Sales: A Juristic and Economic Analysis), Damascus: Dar Al-Qalam, 1997, 39-48.

⁵ Reisman, op.cit, p.115.

⁶ For instance, Reisman, ibid, p.119, argues that “real estate has no set market value”, and therefore allows charging interest in the form of a higher credit price, “even when the buyer realizes that the price has been raised because it includes financing”.

⁷ Samples of various Iska contracts for various business and consumer applications are provided in Reisman, ibid., pp. 124-9.


⁹ See http://www.ipsofactoj.com/international/2004/Part12/int2004(12)-009.htm for the Beximco case decision (accessed on May 28, 2007), and for the Symphony Gems case, see Balz, K. “A Murabaha Transaction in an English Court- The London High Court of 13th February 2002 in
law of a state, that different Islamic legal scholars will differ in opinion on various
contracts, and therefore applied English law only, awarding the contested interest charges
to the Islamic banks in both cases.

In the U.S., the Office of the Comptroller of the Currency issued two letters of
understanding that deemed murabaha (cost-plus purchase re-sale) and ijara (lease to
own) financing to be within the business of banking, paving the road for a number of
financial providers to offer home and auto financing using those two models, and
allowing GSEs such as Fannie Mae and Freddie Mac to buy the mortgage notes
originated using those contracts. In the 1999 letter on murabaha financing, the OCC
wrote: “Lending takes many forms… Murabaha financing proposals are functionally
equivalent to, or a logical outgrowth of secured real estate lending and inventory and
equipment financing, activities that are part of the business of banking.” In its letter on
ijara financing in 1997, it wrote: “here it is clear that United Bank of Kuwait’s net lease
is functionally equivalent to a financing transaction in which the Branch occupies the
position of a secured lender”. 10

The latter two letters were solicited by an Islamic financial provider, and widely used to
promote Islamic financial practices in the U.S. It is therefore clear that the Islamic
finance industry embraces the methodology of emulating the substance of conventional
financial practices using variations on contract forms that were approved by premodern
Islamic jurists (spot sales, credit sales, and leases in the cited examples).

This approach is characteristic of other areas of Islamic finance, including the
reengineering of financial derivatives and other recently developed products. 11 In this
article, I wish to address the fundamental problem of coherence of contemporary Islamic
financial jurisprudence, which follows premodern jurisprudence by focusing primarily on
the permissibility or prohibition of various financial contracts, and the validity conditions
for those contracts. My argument will proceed in three steps:

1. Establish that Islamic financial jurisprudence has always had the stated aim of
   enhancing human welfare, and therefore prohibitions must be seen through the
   lens of welfare-enhancing regulation of financial practices.
2. Establish that in today’s age of financial engineering, utilizing many of the legal
   and financial advances of the past two decades, it is quite easy to synthesize the
   contracts that classical and contemporary jurists forbade from the ones that they
   have permitted.
3. This financial engineering approach was always possible to some extent, but recent
   advances have reduced transaction costs substantially. In premodern societies,
   when transaction costs of ruses to circumvent prohibitions were substantial,

Islamic Investment Company of the Gulf (Bahamas) Ltd. V. Symphony Gems N.V. & Ors.”,
10 See http://www.occ.treas.gov/interp/nov99/int867.pdf for the full text of letter number 867 of
1999 on murabaha (accessed on May 28, 2007), and the earlier letter number 806 on ijara at
11 For a survey and analysis of various trends in Islamic finance, see El-Gamal, Mahmoud,
prohibitions could serve their intended regulatory purpose, albeit imperfectly. In today’s age of low-cost financial engineering, the regulatory substance of prohibitions, contract conditions, and other contract-based juristic rulings has been diluted to the point of rendering the contract-based jurisprudence incoherent.

II. The Economic Content of Contract-Based Islamic Financial Jurisprudence

In his Qur’anic exegesis, the late leading contemporary scholar ibn `Ashur stated that the great classical scholar `Izzuddin ibn `Abdel-Salam showed in a book entitled Al-Shajarah (The Tree) that the following verse [16:90] contains within it the canonical Shari’a roots for all branches of jurisprudence:12 “Verily, God enjoins justice and beautiful dealing, and generosity toward relatives, and He forbids shameful, blameworthy, and unjust activities; He exhorts you so that you may remember”. This is the view that every rule in the Shari`ah is meant to bring benefit or prevent harm, which is a prominent theme in the work of most premodern jurists and legal theorists. This includes ibn Taymiya, who cited the Qur’anic verse [64:16] “Be conscious of God as best you can” and the valid Prophetic tradition “Whatever order I give, follow it as much as you can” to argue that: “The requirement is to maximize benefits and to minimize harm. When there is a tradeoff to be made, the Law dictates taking the greater of two benefits or the lesser of two harms”.

13

The principle that attaining the objectives (maqasid) of Shari`a often requires a benefit analysis had thus become a cornerstone of Islamic legal theory, even if the methodology and rhetoric utilized by jurists does not make that analysis explicit.15 This gave rise to the dictum encoded in the Ottoman Majallat Al-Ahkam Al-`Adliyya and described previously by ibn Qayim al-Jawziya that what matters in contracts is economic substance and not contract language or form.16 Ibn al-Qayim thus built his case for the prohibition of hiyal or ruses that use permissible contracts to mimic forbidden ones, including many of the

---

14 For a very useful overview, see Al-Raysuni, Ahmad, Nazariyat Al-Maqasid `inda Al-Imam Al-Shatibi, Al-Mansura, Egypt: Dar Al-Kalima, 1997, and the references therein. A good English survey of the same material is available in Masud, Muhammad Khalid, Islamic Legal Philosophy: A Study of Abu Ishaq Al-Shatibi’s Life and Thought, Islamabad, Pakistan: The Islamic Research Institute, 1977.
15 Of course, this is not unique to Islamic jurisprudence. Within the context of American common law, Judge Richard Posner argued that: “Often, the true grounds of legal decision are concealed rather than illuminated by the characteristic rhetoric of opinions. Indeed, legal education consists primarily of learning to dig beneath the rhetorical surface to find those grounds, many of which may turn out to have an economic character”, c.f. Posner, Richard, Economic Analysis of the Law, Boston: Little, Brown and Co., 1992, p.23.
16 See the Majallah II(2.) “In contracts effect is given to intention and meaning and not to words and phrases”, at http://www.ummah.com/Al_adaab/fiqh/majalla/introduction.html (accessed on May 28, 2007).
multiple sale methods used in today’s Islamic finance. He argued that:

It is impossible for the Law of the Wisest of the wise [God] to forbid a harmful dealing, curse its [riba, or usury] perpetrators and warn them of a war from God and his Messenger, and then to allow a ruse to result in the same effect with the same harm and added transaction costs in constructing the ruse to deceive God and his Messenger. Indeed, riba on the ground is more facile and less harmful than riba with a tall ladder atop which the two parties conduct the riba… I wonder, which of the harmful effects of riba was removed by this deception and lies?

The great legal theorist Al-Shatibi stated this prohibition of ruses (or legal-arbitrage solutions in contemporary finance) much more generally:

Legal ruses in religion are generally illegal… In this regard, legal rulings are not ends in themselves, but means to legal ends, which are the benefits intended by the law. One who follows legal forms while squandering the substance does not follow the Law.

The contemporary jurist Abdulwahhab Khallaf went further by arguing that:

Benefit analysis and other legal proofs may lead to similar or different rulings… Maximizing net benefit is the objective of the Law for which rulings were made. Other [juristic] legal proofs are means to attaining this legal end, and objectives should always have priority over means.

This coherent view of Islamic jurisprudence as a means to maximizing benefits and minimizing harm, in a very economic sense, is in stark contrast with the pietist and incoherent approach adopted by contemporary jurists who support contemporary Islamic financial providers. For instance, in response to the question “How do you calculate the price of Amanah Home Finance? Are the payments similar to a conventional mortgage? If so, is this acceptable under the Shariah?”, the HSBC Amanah Finance FAQ website answered:

HSBC determines the rates on its Amanah Home Finance using a payment scheme that is competitive with conventional mortgages available in the market. As determined by our Shariah Supervisory Committee, the Shariah permits using the conventional market as a benchmark.

According to the Shariah the cost/ rent in this type of transaction can be set at any

18 Ibid, p. 92.
19 As quoted by Al-Raysuni, op.cit., p.129.
value agreed between the buyer and seller. There is no particular reason why a house financed by this method should be any more or less expensive than a house financed by a conventional mortgage. Although not ideal, it is certainly halal to use the prevailing interest rate as a benchmark for this rate. The criterion for acceptability by the Shariah is that the transaction be compliant with the Shariah, regardless of the price of the goods or how that price is determined.

Consider the example of a Muslim butcher in a non-Muslim country such as China. If he wishes to sell meat that has been slaughtered and prepared according to the Shariah, there is no reason for him not to benchmark his prices to that of conventional Chinese butchers selling the same meat that is not halal. After all, he is providing the same function as a conventional butcher, and seeks similar revenues and profits. Now you may wish that he priced his goods independently of haram (prohibited) meat, but you cannot conclude that the meat he sells is no longer halal. (Adapted from M Taqi Usmani's "An Introduction to Islamic Finance", p.119.)

In other words, the providers of contemporary finance acknowledge that they are using multiple sales and/or leases to mimic the amortization schedule of a conventional mortgage. As we have seen in the introduction, Rabbinic analysis of this transaction would have deemed it no different from an interest bearing loan, and the OCC has enabled the use of the same instruments to finance home mortgages precisely by concluding that the transaction is not materially different from secured lending. The quoted arguments by ibn Qayim and others would apply: all that is accomplished in murabaha home financing is to replicate a conventional mortgage, at payments approximating those of a conventional one, with some added cost for spurious trading and various fees. At a recent conference in Toronto, Canada, it was reported that the “Islamic mortgages” cost the mortgagors roughly an extra 100 to 300 basis points in Canada, and 40 to 100 basis points in the U.S.\(^{22}\)

Following the logic of ibn Qayim, one should first determine what may be the harmful effects of having a mortgage, and then see if the Islamic alternative eliminates any of them: Perhaps the value of the property may depreciate substantially and the mortgagor will be left with a massive debt. Perhaps the payments may be so steep as to make it difficult for the customer to meet other financial obligations. Perhaps the interest rate that was charged was too high relative to the true cost of funds in the economy. Unfortunately, whatever the economic harm, it appears that the “Islamic” murabaha mortgage will result in a larger debt with a higher interest rate, as a result of climbing the legal-arbitrage ladder mentioned in ibn Qayim’s metaphor. One is then forced to conclude based on the economic analysis that if the Islamic mortgage is permitted, then so must the conventional mortgage, and vice versa.

Not so, reads the answer from the Amanah finance website. The difference between the

\(^{22}\) See [http://www.canada.com/nationalpost finanzi alpost/story.html?id=01ff2407-f4fe-4c16-80ad-1172d0d25763&k=5052](http://www.canada.com/nationalpost/financialpost/story.html?id=01ff2407-f4fe-4c16-80ad-1172d0d25763&k=5052) (accessed May 28, 2007). Some providers of Islamic financial services and some observers of the industry have referred to those additional charges and higher interest rates as “cost of being Muslim”, acronym: COBM.
two mortgages is reasoned by analogy to the difference between meat that comes from properly slaughtered livestock and meat that did not.

Of course, those who reason from objectives of Islamic law will then inquire about the comparison between health benefits of slaughtering meat properly (cutting the jugular vein to drain blood more quickly), the humane effect of killing the animal quickly, the importance of discouraging idol worship by preventing Muslims from eating meat that was traditionally sacrificed at the altars of pagan gods, etc. The substance-oriented jurists would cite all of those benefits and ask what benefits the “Islamic mortgage” has produced relative to the conventional one. In fact, they would argue, if one had to choose between the two of them, one may be forced to choose the conventional riba as the lesser of two evils (riba on the ground vs. more expensive riba atop the metaphorical ladder).

Elsewhere in his book, Justice Usmani tried to argue that there is material difference between the two transactions, since the financier ostensibly owns the property for some period of time, thus assuming some ownership risk. While the timing and insurability of this risk are valid counterpoints, I focus here on the transaction from the point of view of the mortgagor only: As far as the mortgagor is concerned, his involvement in the transaction is based on debt, and the debt is higher for the ostensibly “Islamic” transaction than for the conventional transaction to finance the same property.

In the end, the only argument to which supporters and providers of Islamic finance resort is that “process matters”. The analogy to dietary laws is thus not coincidental, since dietary laws are generally unchanging (cured pork or genetically modified pork would still be forbidden) and not necessarily based on any explicit cost-benefit analysis. The consultants and financial providers involved in the Islamic finance industry thus invoke those unchanging rules that pertain mostly to form and not substance (one would not consider another way that kills the animal without causing much pain, and that drains blood more efficiently, as an alternative to slaughter). They would reject the economists’ argument based on pure benefit analysis by arguing that humans are incapable of comprehending all the benefits of following the divine law, and therefore formulaic adherence to the law remains important, even if it is in fact costly (COBM). In light of the juristic principle that what matters in contracts is economic substance and not forms, and to the extent that one can demonstrate that the economic substance in the jurists’ alternative to conventional mortgages is in fact more harmful than conventional transactions, following the example of ibn Qayim, one may charge that the Islamic financial juristic stance is incoherent. Before we can support this claim with a specific economic argument, we need briefly to discuss the rationale for financial regulation and religious prohibitions from an economic standpoint.

III. Contract Based Regulation and Financial Engineering

Financial markets and institutions, especially banks, are by the far the most heavily

---

regulated in most economies today. Economists have often reasoned that regulation of economic activity is generally unnecessary, unless there are overriding issues of systemic risk management or consumer protection. One salient argument that is applicable to financial products is that the benefits or losses from buying financial goods and services are very difficult to ascertain. Certainly the recent crisis of subprime mortgage lending in the U.S. suggests that a large number of customers unwittingly bought adjustable-interest mortgage products without understanding their financial consequences. Even though U.S. financial regulators have not made consumer protection against predatory lending their primary concern, efforts were clearly made to stem the tide of potential defaults on home mortgages, and new federal regulator guidelines are expected soon, albeit mainly justified on the basis of protecting the housing market from collapse. Financial disasters, such as the bankruptcy of Orange County are often cited as prominent examples of the need for regulation of financial products and markets.

American students of law and economics have to strike an uneasy balance between the view that more freedom in markets enhances economic efficiency, which is the primary goal of regulation, and the reality of asymmetric incomplete information, asymmetric bargaining power, and other factors that may render clauses or contracts unconscionable in a court’s eye. The standard approach has been to identify the specific types of products wherein such asymmetric information and bargaining power between buyer and seller may require freedom-restricting regulation.

In this regard, financial products and services are particularly worthy of regulatory considerations since their benefits and costs are spread over a long time period, and many of the seekers of those products and services lack the requisite skill and cognitive ability to understand fully the consequences of various contracts. It is therefore no surprise that financial products, especially borrowing and lending, have always been the subject of regulation and legislation. This includes contemporary regulations, such as usury-law ceilings on interest rates at various states, and the Truth in Lending regulation Z. Similar restrictions date back to some of the earliest secular and religious legal traditions, including the code of Hammurabi, the Torah, and the Qur’an.

Jolls, Sunstein and Thaler (2000) summarize economists’ discomfort with such laws as follows:

---

Puzzle. A pervasive feature of law is that mutually desired trades are blocked. Perhaps most puzzling amid this landscape ... are bans on conventional “economic” transactions, such as usurious lending, price gouging, and ticket scalping. Usury, or charging an interest rate above a certain level, is prohibited by many states in consumer lending transactions... Not surprisingly, economists and economically oriented lawyers often view these laws as inefficient and anomalous.

Various economic explanations have been provided to solve this puzzle. Glaeser and Scheinkman (1998) explained the Biblical requirement to make all loans concessionary by a social insurance argument:28 Most households in ancient societies were poor, and therefore ensuring access to interest-free credit would be optimal ex ante from a social welfare point of view. They find support for their hypothesis by confirming the existence of significant correlation between income inequality and the strictness of usury laws in various American states. El-Gamal (2000, 2006) argued on the basis of human bounded rationality to explain the Islamic restriction of lending to charitable transactions (no interest may be charged, and the principal must be forgiven if the debtor cannot pay, c.f. Qur’an [2:275-9]).29 The general paradigm in Islamic law thus may be paraphrased to conclude that one should not borrow to invest or lend to make a profit. Indeed, it is precisely the charitable nature of concessionary loans that allowed Islamic jurists to exempt them from the rules of riba (a repaid monetary loan is still money for money).30

As discussed earlier in this article, today’s Islamic finance relies primarily on financial engineering tools that are commonly used for legal arbitrage purposes. For instance, instead of extending a mortgage loan, the “Islamic” alternative would use special purpose vehicles to buy the property and then sell it on credit (cost-plus or murabaha financing) or to buy the property, lease it to the customer, and then sell it at lease end (lease-to-purchase or ijara financing, sometimes utilized within what is called a diminishing partnership or musharaka mutanaqisa between mortgagor and mortgagee). Various corporate and sovereign bond alternatives have also been structured similarly (using the name sukuk, or certificates of debt, which is a synonym of the Arabic word sanadat that is normally used for bonds; the term sukuk was associated until recently in the modern era with the Eastern Church’s name for indulgence certificates: sukuk al-ghufran).

In addition to loans, many other contemporary financial transactions (e.g. forward and futures trading, options trading, etc.) have been banned by the majority of Islamic jurists. Some of those jurists then proceeded to certify “Islamic” alternatives that are synthesized from simple sales, leases, and other premodern contracts.\textsuperscript{31} We have already seen how loans can be synthesized from credit and spot sales. In addition, Islamic jurists argued that the rate of return on capital in the credit sale or lease may be benchmarked to conventional interest rates. Since \textit{riba} is the subject of the strictest of all Islamic prohibitions, this means that it is possible to benchmark to any other variable or index. For instance, if the jurists rule that investing in a particular company is forbidden (perhaps because it owns and operates beer breweries), then one can just buy some permissible property and lease it back collecting rent that is benchmarked to capital gains and dividend payments from the forbidden stock.

Derivatives were no exception. The majority of contemporary Islamic jurists have generally forbidden trading in forwards, futures, options, and swaps. However, there are premodern contracts that look sufficiently similar to allow synthesis. The ancient salam contract is similar to a forward, but the price must be paid up front. Of course, now that we have synthesized a credit facility with spot and credit sales, we can use that facility to lend the present value of the price to the forward buyer now, thus synthesizing the forward from one salam, one credit sale, and two spot sales. A swap may now be easily synthesized with two forwards.

Similarly, a call option may be (and has been) synthesized from a downpayment practice known as `urbun, wherein the downpayment would be forfeited if the sale is not concluded. The downpayment is thus characterized as a call premium, and conclusion of the sale is seen as exercising the option at a strike price equal to the agreed upon price less the downpayment. With synthetic call options and forwards, we can use the well-known financial principle of put-call parity (forward long = long call + short put) to synthesize a put option (short put = forward long – long call; long put = forward short – short call). If a company cannot be bought due to some portion of its business being disallowed, we can create two fictitious companies (special purpose vehicles) to separate ownership of the permissible (e.g. restaurant) and impermissible (e.g. bar) components, and allow Muslim investors to buy the former; a tool for private equity firms.

It should be clear based on this short summary how Islamic finance based on Shari`a arbitrage is constructed. First, a prohibition is invoked to create market demand for an “Islamic” alternative. Then, using the methods of financial engineering, we bundle or unbundle various contracts, possibly using multiple steps, to synthesize the ostensibly forbidden practice. Finally, the “Islamic” brandname for the synthetic alternative is established by using Arabic names for the products and contracts that are marketed, as well as for the institutions that market them, and retaining the consulting services of religious scholars, whose names may be familiar to potential customers prior to their involvement in Islamic finance or by virtue of marketing campaigns to establish their legitimacy.

\textsuperscript{31} For a survey of the array of “Islamic financial” devices, see El-Gamal, Mahmoud (2006).
IV. Incoherence of Contract-Based Jurisprudence

If we accept the basic premises discussed in section II, that what matters in contracts is economic substance and not contract name or structure, and the analysis in the early part of section III, that the objective of Islamic prohibitions is primarily to serve a regulatory function, then we are faced with a dilemma. Returning to the quote by ibn Qayim al-Jawziya, it is clear that his statement assumed the existence of harmful effects in conventional interest-based lending. While we have briefly discussed some of those potential harms, that is not our primary goal in this article. Our main concern is the point that was highlighted by ibn Qayim: that whatever harmful effects existed in the original (forbidden) product are by necessity present in the synthetic version, and we have added transaction costs that reduce welfare further (riba transaction atop a tall ladder). To that we may also add the view that the bulk of advances in finance have dealt with disentangling the various components of a financial transaction so that it may be priced more efficiently. To the extent that Islamic legal arbitrage engages in artificial bundling of those components, there may be other efficiency losses created by the structure. Finally, a host of legal risks are inherent in all new structures, and thus potential social harm is increased, not reduced, by the exercise of financially engineering modern transactions from premodern contracts.

Economists and religious scholars are in agreement that any regulation of financial contracts, e.g. forbidding two parties from conducting a transaction to which they both consent, could be incoherent and efficiency reducing. Therefore, to make sense of religious and secular regulations, both economists and religious scholars advise that we must look at the economic content of any given transaction, rather than consider only its names and legal structures. To illustrate, assume that allowing transaction A would lead to more harm than benefit, and therefore it was forbidden. Of course, there would be no need for a prohibition if no two parties would ever, out of their own volition, choose to carry out the transaction. In other words, the only relevant regulations and religious prohibitions are – by definition – the ones that forbid transactions that people would conduct absent the prohibition or regulation. Now, let’s assume that the regulators or religious authorities deemed each of transactions B and C individually to have more benefit than harm. Therefore, there were no prohibitions against either B or C. Assume finally that A=B+C. Then, we have a legal arbitrage opportunity that can be exploited by financially engineering A from B and C, knowing that A must be desirable to have been forbidden in the first place.

To consider a concrete example, let A, the forbidden contract, be interest-based loans, and let B and C represent spot sales and credit sales of any goods. An ancient contract called in Islamic jurisprudence bayʿu al-ʿina, or same item sale-repurchase, may thus be utilized to synthesize A from B and C. Assume that A would result in X lending $100 to Y, and receiving $110 in one year. Assume that Y owns an asset S, and let B and C represent credit and spot trades in S. Now, all Y has to do is to sell S to X for a cash price of $100, and then to buy it back for a credit price of $110 payable next year. The net effect is that the asset made a round trip from Y to X and back, but more importantly the
loan is synthesized, since X gives Y $100 now, and Y owes X $110 payable in one year. This practice is actually quite common in Malaysia, where same-item sale-repurchase is not deemed forbidden, as long as the two sales are not incorporated in a single contract.\textsuperscript{32}

However, the majority of schools of Islamic jurisprudence forbade same-item sale repurchase without a third party intermediary. Let the third party be Z, and assume that Z is the party that owns S. We now need to conduct one credit sale and two spot sales. First, X buys S from Z and pays $100 on the spot. Second, X sells S to Y on credit, for a price of $110, payable in one year. Finally, X sells S to Z for the cash price of $100. The net result, again is that the asset S has made a round trip, X paid $100 now, Y received $100 now, and Y owes X $110 payable in a year. Loan A has been synthesized again. This transaction is commonly known as \textit{tawarruq}, which literally means turning the asset S into silver, or monetizing it. \textit{Tawarruq} is forbidden or reprehensible in most schools of Islamic jurisprudence. However, it is allowed as a minority opinion in the Hanbali school, which is dominant in the Gulf Cooperation Council (GCC) countries where Islamic finance has been growing extremely fast. The Fiqh Council of the Muslim World League in Makkah, Saudi Arabia, issued a \textit{fatwa} (legal opinion) in 1998 permitting the practice as an alternative to interest-based lending.

In 2003, the same Fiqh Council of the Muslim World League issued another \textit{fatwa} after observing the very common practice of \textit{tawarruq} by GCC-based banks. In that practice the bank (Y in our example) typically has a standing agreement with a metal or other commodity dealer (Z in the example). Whenever a customer (X) comes to the bank demanding a loan, the bank has the customer sign the debt paperwork in the front office, while three transactions are done in the back office: a spot purchase from Z, a credit sale to X, and a spot sale from X to Z, all within minutes or seconds. The second \textit{fatwa} ruled that unorganized individual \textit{tawarruq} was still allowed, but the organized \textit{tawarruq} as practiced by banks was not materially different from interest-based lending and therefore is not allowed.\textsuperscript{33} Interestingly, none of the banks that started the practice based on the first \textit{fatwa} appears to have stopped the practice based on the second.

The ruling that a contract is allowed for individuals, but not in an organized form for institutions, strongly suggests that the religious regulation is \textbf{not} contract based. However, since the Islamic financial providers have assumed that Islamic financial jurisprudential regulation is in fact contract based, they disregarded the second \textit{fatwa}. “If you tell us that the contract is permissible, that is all that we need to hear”, the bankers’ practice seems to suggest.


\textsuperscript{33} The two Fiqh Academy decisions on \textit{tawarruq} are reproduced at the following URL: http://www.islamonline.net/servlet/Satellite?pagename=IslamOnline-Arabic-Ask_Scholar/FatwaA/FatwaA&cid=1122528623080, (accessed May 30, 2007).
Indeed, how would we understand the apparent inconsistency between a generally contract-based approach to jurisprudence, and the *fatwa* not to use the contract in a systematic way? One economic argument may be constructed based on transaction costs considerations: The vast majority of jurists forbade the practice of synthesizing an interest-bearing loan using one credit sale and one cash sale (*`ina*). A dominant but smaller majority forbade the use of two cash sales and one credit sale (requiring at least three parties) to synthesize the same interest-bearing loan (*tawarruq*). Of course, the transaction costs of three sales with three parties are higher than for two sales with two parties, hence reducing the chance of using this contract as a ruse for usurious lending. Now, we have the only major contemporary juristic council to permit *tawarruq* ruling that it should not be used systematically by banks, perhaps precisely because the banks have been able to reduce transaction costs substantially (through economies of scale and technological advances in communication), thus making this ruse for *riba* easier to use.

This may be an overarching argument to explain generally why sale-based, lease-based, multi-contract and possibly multi-party based ruses were left untouched. The jurist conducting a social cost-benefit analysis argues that added transaction costs for contracts and contracting parties should serve as an impediment to the development of ruses. As transaction costs fall, the jurist may prevent simpler ruses, but that leaves more complex ruses with more contracts and contracting parties available. After all, *tawarruq* with three parties seems to be the most complex ruse for *riba* discussed by scholars. So, we can add another trading party and/or another commodity, and promptly get an *n*-party *m*-trade transaction with the net effect of replicating the interest-bearing loan, but for which no jurists have ever issued an opinion. It is impossible for the jurist to stop all of those increasingly complex ruses without banning credit or spot sales, which would clearly not be supportable in the overall social cost-benefit analysis.

Therefore, jurists of the classical period struck a balance by allowing or remaining silent on relatively complex and expensive ruses, perhaps reasoning that any further restriction would do more harm than good. Of course, with improvements in legal and communication technology, transaction costs of those ruses have been reduced considerably, thus enabling the development of an entire legal-arbitrage industry under the name of Islamic finance. I would argue that if the classical jurists were with us today, they would have used their economic reasoning to determine how best to regulate based on a new social cost-benefit analysis that takes into account the current transaction costs of various financial instruments and devices.

This idea of revisiting regulatory and legal frameworks because of advances in technology is not without precedent. In Islamic jurisprudence, it is well known that Imam Al-Shafi’i developed one system of jurisprudence in Iraq, and then developed an entirely different one when he moved to Egypt, since the legal and economic conditions there were different. Islamic jurists summarized the underlying principle in their statement that
“fatwa is different for different times and different places”.\textsuperscript{34} A similar notion that traditional regulation of financial products has been rendered incoherent by advancement in legal, financial, and communication technologies in recent decades was central to a major regulatory overhaul in the U.S. Following the Great Depression and numerous bank failures, the Glass-Steagall act was passed in 1933 to limit risky behavior and conflicts of interest in financial institutions by restricting the set of products permissible for commercial and investment banks, as well as for insurance companies. Over the course of many decades, the regulatory wall thus built between commercial and investment banking was compromised by a number of financial, legal, and communication technology advances. For instance, starting in the 1970s, with the advent of ATMs, non-bank financial institutions, including securities brokerages, were able to offer their customers most of the banking products that they desired. In due time, nonbanks could also accept time deposits, investment banks were able to acquire failed savings and loans associations, and holding companies were able to own both commercial banks and investment banks, rendering the formal regulatory walls between different types of financial institutions incoherent.

The legislative response to those developments was to abandon the product-regulatory framework of the Glass-Steagall Act, which was repealed by the Gramm-Leach-Bliley Financial Services Modernization Act of 1999. The latter act explicitly replaced the “financial-product approach” to regulation by a “functional approach”, allowing different financial regulators to regulate different activities of the various institutions.\textsuperscript{35} In addition to the reduced separation between commercial and investment banking in the U.S., there is also manifest reduction in the separation between commerce and banking. For instance, auto manufacturers such as GM and Ford, electronics manufacturers such as Sony, and various retail stores, not to mention online retailers and other nonfinancial sector companies, have been offering financial services on a consistent basis, including some traditional banking services. Those developments bode well for views of Islamic finance as universal banking that bundles trade (e.g. purchasing an automobile) and financial services (e.g. getting auto financing directly from the seller, which would satisfy the conditions of murabaha and ijara as currently practiced by Islamic financial providers), even though they clearly reduce the need for an “Islamic finance” industry.

The main regulatory lesson from the story of the Glass-Steagall Act and the Gramm-Leach-Bliley Act, however, is to note that even in the modern era, regulations that work for some time may fail to achieve their objectives after a period of legal and financial technical progress. Under those circumstances, a coherent regulatory approach requires revisiting one’s legal framework and – if necessary – developing a new one that is consistent with the current financial and legal technological conditions surrounding financial markets and institutions.

\textsuperscript{34} See a slight variation on this juristic rule in the Majallah II(39.) “It is an accepted fact that the terms of law vary with the change in the times”, at http://www.ummah.com/Al_adaab/fiqh/majalla/introduction.html (accessed on May 31, 2007).
Along similar lines, one coherent regulatory advance in Islamic finance would be to abandon contract-based jurisprudence entirely, since it has been shown to be incoherent in an age when millions of transactions can be carried out over fiber optic cables at minimal cost. The development of such jurisprudence is outside the author’s area of expertise, and well beyond the scope of this article. However, it is important to note that this is not a problem that is unique to Islamic jurisprudence, especially since the objectives of Islamic financial law are generally very similar to those of other legal and regulatory traditions. In Islamic financial jurisprudence, as in those other legal and regulatory traditions, the positive approach seems to be increasingly to start with an economic analysis of the law to infer its objectives, and then to design new regulatory frameworks that serve those objectives within the current economic reality. That may require abandoning pietist adherence to the opinions of premodern jurists, but it may also be seen as following their example more closely: Coherent contemporary Islamic financial jurisprudence would do justice to premodern jurists, and follow their example, by thinking more about the economic substance of financial regulation, and abandoning the outdated contract-based approach.