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The Wa'd-based Total Return Swap: Questions of Religious Compliancy in Islamic Finance

Introduction:

Islamic finance has been criticized by both insiders and outsiders of the industry that its modern practices do not faithfully follow Islamic belief. Critics reason that the industry's form of finance seems to follow the letter of Islamic law, as strictly reasoned, without necessarily adhering to the spirit of the law. While participants generally agree on broad rules on what Islamic law allows and prohibits, they debate the Islamic validity of specific practices. They also debate on the objectives toward which Islamic financial practices should follow, and whether such financial practices impede on these objectives – objectives such as social welfare, the creation of a distinct Islamic economy, and the survivability and profitability of Islamic banking institutions are heavily prioritized.

On the other hand, profit motives have been a powerful force in developing new Islamic financial instruments. There is a strong incentive for bankers, whether Muslim or not, to create new Islamic financial instruments to meet the ever-evolving demands of Muslim investors. As a result, the technical details of some Islamic financial products have become more than "mere details." They have become the locales of intense economic and ethical debates and struggles.

The Wa'd-based total return swap represents one locale of such debates. Scholars vigorously debate amongst each other over the technical details found within this complex transaction. And the ethical stakes here are high. To certain scholars, the approval of this product would be a colossal affront to Islamic ethics. To practitioners, the validation of this product would pave the path for further sophistication in Islamic finance.

The scholarly community ultimately condemned the Wa'd-based total return swap shortly after its first introduction. I argue that the most pressing issue was not due to concerns of conformity with the letter of the law, but rather that the product would allow for a direct opposition to the spirit of the law. The "mere details" in the transaction carry a large implication, as it would allow for forbidden returns to be legitimized. If that were true, then there would not be a need for Islamic finance at all. To certain scholars, the product would sow the seeds of the industry's own destruction.

This paper is compartmentalized into five parts. The first part covers some of the basic rules found within Islamic finance, and some of the scholarly tradition in interpreting Islamic law. The second part covers the financial structure of the Wa'd-based total return swap with a detailed example. The third section details where the demand and supply of the financial product. The fourth part covers the debates for and against the product. The final section touches on the form versus substance narrative that underlying the debate found in section three.

SECTION 1: WHAT IS ISLAMIC FINANCE?

1. What is Islamic Finance and why is it important?

Islamic finance is a form of finance "that is based, in [its] objective and operations, on Islamic law (Shariah)."[1] Islamic finance has seen dramatic growth lately, with an average of 17% growth rate per year from 2008 to 2012. Currently, its total assets amounts to around $2 trillion.[2] Islamic finance is not only practiced in Muslim-majority countries, but in fact is a global enterprise: markets for Islamic finance have sprouted in countries like Japan, South Africa, Singapore, and Germany. Overall, it is operating in more than 105 countries.[3]

This form of finance also allows for Muslims to practice finance in a way that is compliant with their religious understandings. As such, practicing Islamic finance can thus be seen as a vehicle to embrace and express religious piety. There are around 1.6 billion Muslims worldwide, representing 23% of the world's population as of 2010. The Muslim population is also experiencing rapid growth, and by the year 2070, Muslims are predicted to outnumber Christians.[4] As a result, Islamic finance provides this burgeoning Muslim population with a critical access to financing (i.e. insurance, auto loans, mortgages, etc.) in a way that reconciles fundamental Islamic tenets.

2. What does Islamic finance prohibit?

Shariah principles require financial transactions to be tied to real economic productive activities, with special emphasis on equity, social justice, fairness, risk sharing, and economic development.[5] The prohibitions of *riba* (interest), *gharar* (uncertainty), and *maisir* (gambling/speculating) are some of the most salient financial restrictions found in Shariah law.

Riba, meaning usury, is a term with a long and contested history in Islamic discourse. However, the majority of Muslim scholars believe that any form of non-zero interest constitutes as riba. Today, within the Islamic finance community, bankers and Islamic scholars generally agree that riba is any monetary value beyond the principal mount of the loan or debt.[6] The Quran, the most important underlying foundation of Islamic law, dictates that:

> "Those who devour riba shall not rise except as he arises whom Satan has confounded by his touch. That is because they said, "buying and selling is like riba". And yet God has made buying and selling lawful, and riba unlawful"[7]

Here, the Prophet Muhammad argues that riba is tainted with the evil influences of Satan, and those who consume riba would not be able to enter the gates of heaven. Sheikh Nizam Yaquby, a top Shariah scholar of Islamic finance argues, "there is no sin in the Koran — not even drinking, not even fornicating, not even homosexuality — which could be as abhorrent and serious as

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[1] Warde. "Islamic Finance in Theory and Practice." *Islamic Finance in the Global Economy*. N.p.: Edinburgh UP, 2010. 7. Print.

[2] The Economist. "Big Interest, No Interest." *The Economist*. The Economist Newspaper, 13 Sept. 2014. Web. 29 Apr. 2016.

[3] ibid

[4] Pew Research. "Muslims and Islam: Key Findings in the U.S. and around the World." *Pew Research Center RSS*. N.p., 07 Dec. 2015. Web. 30 Apr. 2016.

[5] Associate of Corporate Counsel. "Legal Resources." *Establishing an Effective Compliance Program: An Overview to Protecting Your Organization*. N.p., n.d. Web. 29 Apr. 2016.

[6] Kettell, Brian. *Introduction to Islamic Banking and Finance*. Chichester, U.K.: Wiley, 2011. 37-42. Print.

[7] Qur'an 2:275

dealing in *riba*."[8] Clearly, eschewing interest is of the highest priority, as it is considered one of the gravest of sins that one can commit.

Mahmoud El-Gamal defines *gharar* as "the sale of probable items whose existence or characteristics are not certain, due to the risky nature which makes the trade similar to gambling."[9] *Gharar* is thus the uncertainty that arises when the details of a transaction are not fully known. According to the objectives of Shariah law, uncertainty creates a risky environment that may lead to inequality at the expense of others.

According to El-Gamal, the rationale for prohibiting *gharar* is that this protects individuals from issues stemming from information asymmetry. If A has more information than B, then A could certainly exploit B's naiveté and take advantage of B. As a result, when structuring an Islamic finance product, the details of a transaction must be fully laid out by both parties so as to avoid any kind of uncertainty that may be exploited by either party.

Maysīr, meaning gambling or speculation, is also prohibited in Islamic finance. Gambling produces a zero-sum game, where one party gains at the loss of another. Gambling thus yields transfer of existing wealth from one party to another. This introduces notions of inequality and unfairness, which is incompatible with Islamic law.

Further, it is dubious as to how gambling can contribute to the real economy. The logic goes that in order to create new wealth and economic growth, the economic process must do more than simply transfer existing wealth been participants.[10] Human efforts and physical resources are better used to create new economic wealth rather than new transfers of existing wealth. Please see Appendix A for more information.

Other rules include the prohibition of investments in specific sectors in tobacco, pork, pornography, and alcohol. These are industries that are involved in acts that are explicitly inconsistent with Shariah law.[11]

3. Islamic Jurisprudence

Practices in Islamic finance are extremely diverse, and it would be a mistake to assume that disagreements and nuances do not exist across different actors in Islamic finance.[12] Kamali contends that Islamic law can be seen as a dichotomous object; apart from the core rules as advanced by the Quran and Sunnah, there is also room for human reasoning (fiqh).[13] Although the religious texts are concerned with laying down basic guidelines, when Shariah law no longer serves its original intention, it is the scholar's responsibility to provide a suitable alternative. Because of this space for human reasoning, one scholar's interpretation of *riba*, *gharar,* or *maisir,* may be inconsistent with views of another scholar.

The diversity in Islamic law can also be seen through the existence of different schools of thought in Islamic jurisprudence. The main difference in the schools of thought is the debate between form and substance. Scholars under the Shafi'i and Hanafi umbrellas, who "stress the

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[8] Power, Carla. "Faith in the Market." *Foreign Policy Faith in the Market Comments*. Foreign Policy, n.d. Web. 29 Apr. 2016.

[9] El-Gamal, Mahmoud Amin. "Primer: A Basic Guide to Contemporary Islamic Banking and Finance." (2000): 7. Web. 29 Apr. 2016.

[10] Associate of Corporate Counsel.

[11] Ibid

[12] Warde 2

[13] Kamali, Mohammad Hashim. 1999. "Law and society: The interplay of revelation and reason in the shariah." Pp. 107–110 in John Esposito, ed., The Oxford History of Islam. Oxford: Oxford University Press.

externality of conduct without exploring the intent behind it,"[14] would look primarily at the form of the financial product to surmise whether it is consistent with Islamic rules. On the other hand, scholars in the Maliki and Hanbali camps argue that one must also look at the substance, or the intent, behind using such products.[15] Not only is it sufficient for financial products to follow the letter of the law, it must also be consistent with the intent and spirit of the law. As we shall see, disputes arise with controversial interpretations.

SECTION 2: FINANCIAL ANALYSIS OF WA'D BASED TRS

1. What is a conventional swap? What is a total return swap?

A swap is simply an agreement between two parties, whereby each party agrees to swap their respective cash flows with one another for a specified amount of time.[16] In common practice, one cash flow is typically fixed, while the other cash flow is floating, where cash flows can change every time period. For instance, let us assume that A makes $5 every year (fixed payment), whereas B makes anywhere between $1 and $10 every year (floating payment). Once both parties enter into a swap contract, A will pass off his $5 cash flow to B every year. Subseqquently, B will pass off whatever revenue – between $1 to $10 – he earns that year to A. Note that B's cash stream is uncertain, one year he may make $1, the next year he may make $8. To briefly summarize, at the end of every year, A effectively receives B's variable payments, whereas B receives A's fixed payment. As a result of this conventional swap contract, A swaps his own cash flows for B's cash flow every year, and vice versa. Put simply, a swap exchanges, or "swaps", between two parties. See Figure 1 for a visual representation.

	Year 1	Year 2	Year 3
A's Cash Flow Without a Swap	$5	$5	$5
B's Cash Flow Without a Swap	$1	$4	$9
A's Cash Flow After Swap	$1	$4	$9
B's Cash Flow After Swap	$5	$5	$5

Figure 1

A total return swap is similar to a conventional swap, but one of the cash flows must be based on the return of an underlying asset. To make the example above a total return swap, either A or B's cash flows must be derived from an underlying asset.[17] An underlying asset can include, but is not limited to, equity indexes, loans, or bonds.

But why would anyone want to use a total return swap (TRS)? TRS allows for a party to receive the total return from an underlying asset owned by another party without actually owning it. Let's assume that in the example shown above, B receives those variable income from a bond that pays out coupons anywhere between $1-$10. The math of the table above stays the same. But what is different is that A can access the returns of the bond without actually having to own the bond itself.

[14] Kamali 132
[15] ibid
[16] Investopedia. "Swap Definition | Investopedia." *Investopedia*. N.p., 25 Nov. 2003. Web. 29 Apr. 2016.
[17] Investopedia. "Total Return Swap Definition | Investopedia." *Investopedia*. N.p., 24 Nov. 2003. Web. 29 Apr. 2016.

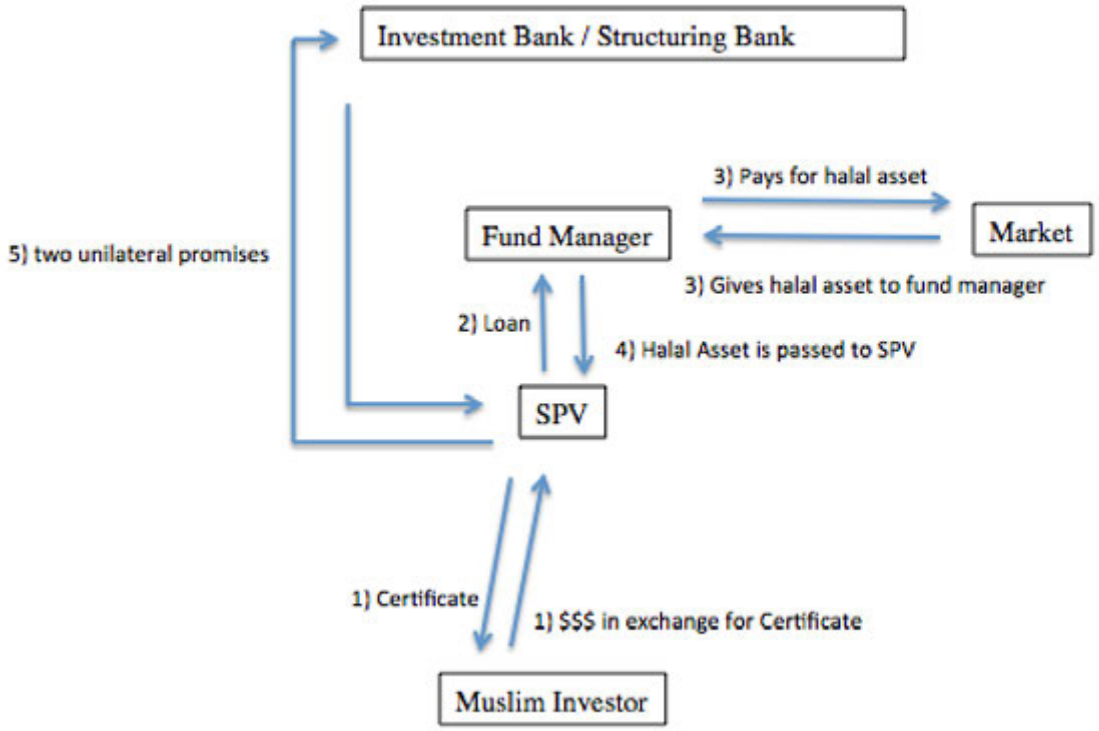
5. What is a Wa'd-Based Total Return Swap?

Deutsche Bank initially introduced the Wa'd-based TRS in 2007, arguing that it is consistent with shariah.[18] A Wa'd-based TRS enables a Muslim investor to gain exposure to non-halal, or non-shariah compliant, assets without having to own the underlying asset itself by using two unilateral promises (a unilateral promise is called a Wa'd).[19] This Wa'd-based TRS is similar in structure to the TRS detailed above, but the cash swap only takes place once at the maturity of the swap contract. The following section offers a comprehensive outline of the mechanisms and structure of the Wa'd-based TRS.

6. Mechanism:

1) A Muslim investor buys a note from a Specialized Purpose Vehicle (SPV). An SPV is a legal holding entity created by a bank.[20] As a result, the Muslim investor can claim future cash flows entitled by the note/certificate, whereas the SPV receives the notional amount of the note.
2) The SPV, now in possession of the Muslim's investor money, provides a loan to a fund manager.
3) The fund manager goes and buys a Shariah-compliant, or halal, asset.
4) The fund manager passes on the asset to the SPV. Legally, the SPV now owns the underlying asset.
5) During this stage, the SPV enters into two unilateral promises with the bank:
   - The first promise is one is that the bank promises to *buy* the halal asset from the SPV at a price that is linked to a non-halal benchmark at maturity. This non-halal benchmark may simply be a formula created by a bank that is mutually agreed upon by both parties.
   - The second promise is one that the SPV promises to *sell* the bank the halal asset at a price that is linked to a non-halal benchmark at maturity.[21]

[18] Atallah, Chady C., and Wafica A. Ghoul. "The Wa'd-Based Total Return Swap: Sharia Compliant or Not?" *The Journal of Derivatives Derivatives*19.2 (2011): 71-89. Web.
[19] Atalah and Ghoul 72
[20] Investopedia. "Special Purpose Vehicle/Entity (SPV/SPE) Definition | Investopedia." *Investopedia*. N.p., 26 Nov. 2003. Web. 29 Apr. 2016.
[21] Atallah and Ghoul 78



7. Example: Ali and Bank X

We will use an example to clarify this structure. For the sake of simplicity, we are assuming that both transaction and borrowing costs are zero. Let us assume that Ali is a Muslim investor who wants a Shariah-compliant way to be exposed to non-halal assets. He goes to Bank X to ask for help. As a result, Bank X creates a new SPV and calls on Bryan, a fund manager, to help facilitate this deal.

Ali deposits a $100 into the SPV, and in return, receives a note entitling him to the returns that may be gained from this TRS. The SPV then provides a $100 loan to Bryan, our fund manager. Bryan then has to try and find a halal asset, and in this case, he chooses to buy $100 worth of stocks in Apple. Apple stock is considered a halal asset because it is not an interest-bearing product, and it complies with other stipulations described under Shariah law. Following the purchase, Bryan passes on the ownership of the Apple stock to the SPV. Effectively, the SPV now owns Apple stock.

The bank, with the agreement of the Ali in connection with the SPV, will establish a benchmark to which the halal asset will be compared. This benchmark could be a formula derived from the performance of non-halal assets.[22] In this fictitious transaction, both parties agree that the benchmark would be a $100 benchmark based on the performance of US Treasuries. That is, if US treasury prices go up by 10%, the benchmark may increase to $110 in worth; if US treasury prices were to go down by 10%, the benchmark may decrease to $90. Thus, the benchmark simply tracks the performance of US Treasuries. Please see Appendix B for further clarification.

[22] Irfan, Harris. "Doomsday Fatwa." *Heaven's Bankers*. N.p.: n.p., n.d. 158. Print.

After the benchmark is agreed upon, each party will make a promise to the other party. In the first unilateral promise, Bank X will promise to buy Apple in year one at the price of the US Treasury benchmark in year one. In the second unilateral promise, the SPV promises to sell Apple to Bank X at the US Treasury benchmark price in year one.

Let us then consider two scenarios that will further clarify this mechanism. The first scenario depicts a situation in which the halal asset outperforms the non-halal asset. Let us assume that in year 1 Apple's price increases to $110, whereas the Treasury benchmark is still worth $100. Under the construct of the first promise, would Bank X like to exercise his promise? In this case, yes, the Bank would like to exercise this promise. The bank can buy Apple for $100 and sell it to the market for $110. Under the second promise, would Ali like to exercise its promise? No, because Ali can only sell Apple to Bank X at the benchmark price of $100. Apple's stock is worth $110, so why would Ali want to sell his stock for $100, losing $10 in opportunity cost? In this first scenario, the bank gains $10, whereas the Muslim investor gains nothing.

The opposite becomes true in the case that the halal asset underperforms the non-halal asset. That is, Bank X would not exercise his promise, whereas Ali would exercise his promise. In this case, Ali gains while Bank X gains nothing. Further clarification of this inverse can be found in Appendix C. See Figure 2 for a diagram detailing possible results from Ali and Bank X's Wa'd-based TRS deal. This graph is adapted from Atallah and Ghoul's diagram.

Inception of Swap			
Muslim Investor		**Bank**	
Apple (halal asset) is worth $100		Benchmark value is worth $100	
Investor can sell Apple at the Treasury benchmark price at maturity		Bank can buy Apple at benchmark price at maturity	
Maturity			
First Scenario		**Second Scenario**	
Muslim Investor	Bank	Muslim Investor	Bank
Apple is worth $110	Benchmark is worth $100	Apple is worth $100	Benchmark is worth $110
Will not enforce right to sell as he is not interested in selling Apple at $100	Will enforce right to buy, as he is interested in buying Apple at $100, and then selling it back to the market at $110.	Will enforce right to sell, as he can sell Apple at $110	Will not enforce his right to buy, as he can only buy Apple at $110, when market value is $100.
Result			

Investor receives no profit.	Bank profits $10	Investor profits $10	Bank receives no profit.[23]

Figure 2

8. Additional Details and Clarification:

Why does Bank X have to set up an SPV? As mentioned earlier, SPVs are simply legal holding entities. By creating a separate company that holds all of the cash and assets, the

> "segregation means a legal and physical separation of the money from any other funds, so that under no circumstances can there be a co-mingling of investor's cash with non-Shariah compliant funds from other sources."[24]

By issuing the SPV, the Muslim investor is guaranteed that his money would not be mixed up with other sources of non-Shariah compliant funding. Put simply, the Muslim investor is assured that all the cash that the SPV has will only be used for Shariah-compliant purposes. Thus the inclusion of an SPV is not simply a matter of secular law, but an accommodation to the idea that Islamic finance should be segregated from conventional finance to the extent possible.

The issue of how benchmarks are determined may also require further clarification. Through the usage of financial engineering, benchmarks could be derived from the performance of any type of asset. All that matters is that the price of the benchmark equals the halal asset's price at the initiation of the contract.[25]

SECTION 3: DEMAND AND SUPPLY, WHERE IS IT COMING FROM?

1. Why is there a demand for Islamic TRS, and where is it coming from?

As mentioned in the introduction, Islamic finance is experiencing rapid growth. With greater assets under management, Islamic investors have seen a need to find novel ways to manage their risk. Some Western observers have gone to say that "Islamic institutions and investors from the GCC region are more exposed than their Western counterparts to changes in market conditions"[26] because they lack the necessary tools to hedge and eliminate their risks. Financial derivatives, like the Wa'd-based total return swap, offers Muslim investors the ability to better control the fluctuations in their investment portfolios.

There is also a need from Muslim investors to diversify their portfolios. By including financial instruments of different asset classes, total portfolio risk could be reduced. Access to financial derivatives, such as total return swaps, could allow Muslim investors to diversify out of their normal "vanilla" products, such as Shariah-compliant equities and contracts.[27] In addition, Wa'd -based TRS allows for investors to seek non-halal returns without having to own the underlying non-halal asset. That is, the investor could get a return on a US Treasury without technically having to own it. As a result, the investor can gain exposure to the US credit economy. However, recall that direct investment in interest and credit products violates Shariah precepts. As we will later see, critics of Islamic TRS raise the concern that the product can disguise riba as something legitimate while simultaneously adhering to the letter of the law.

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[23] Atallah and Ghoul 79
[24] Irfan 151
[25] ibid
[26] Foster-Jones, Martin. "The Evolution of Islamic Derivatives." King and Spalding, n.d. Web. 29 Apr. 2016. <http://www.kslaw.com/imageserver/kspublic/library/publication/2012articles/2-12islamicfinancenewsforsterjones.pdfthe evolution of islamic derivatives>.
[27] ibid

There has been solid demand from wealthy Muslim investors as well. One of the biggest purchasers of the Wa'd-based TRS structured by Deutsche Bank was the private banking department of the Dubai Islamic Bank, a client that would turn out to be the single biggest buyer of Deutsche's bank Islamic products.[28] Conservative scholars have dubbed such investors as individuals who value Shariah compliance secondary to investment return, whereas Shariah compliance is considered only a "bonus feature."[29]

2. Who is structuring Islamic TRS? Who is supplying them to the market?

The Wa'd-based TRS was initially constructed by Deutsche Bank in 2007. They outlined an investment structure "that facilitates the issuance of Shariah-compliant securities, enabling investors access to additional asset classes."[30] Their ambitions did not end there; it claimed further that Deutsche would be "pioneering innovative Shariah compliant solutions."[31] Since the 70s, multinational banks have been heavily involved in devising and aiding Muslim bankers with the structuring of shariah-compliant financial products. Firms such as Deutsche Bank have expanded its operations in Dubai and Malaysia as a way to penetrate into Islamic finance market. Deutsche Bank is not alone in this intiative; multinational banks such as Goldman Sachs and HSBC have also been players in Islamic finance.

The TRS was structured by a team of bankers under the leadership of Geert Bossuyt, a Belgian Catholic with a conventional derivatives background. Bossuyt opined as to "why should Muslims be restricted from harnessing the power of financial markets?"[32] Bossuyt was juxtaposing the number of financial options that Westerners and Muslim investors have access to. Westerners have the liberty to take views in any markets, whether it be in ETFs, hedge funds, derivatives or structured products. Muslims, on the other hand, have access to limited products, and yet at a substantially greater cost.[33]

With the ambition in place, Bossuyt partnered with Dar Al Isithmar, a subsidiary of Deutsche Bank and a joint venture with Oxford University. Dar Al Isithmar is a think tank tasked with creating a new range of Shariah-compliant financial instruments for the Islamic community. Working alongside Bossuyt and his team was Sheikh Hussein Hassan, one of the most prominent Shariah experts in Islamic finance jurisprudence. Sheikh Hassan was primarily tasked with helping Deutsche conceptualize a structure that would be compliant with Shariah law. The collaborative effort eventually produced the White Paper that was distributed online in 2007, outlining the TRS structure that was described earlier in this paper.[34]

It was the first time that an investment bank has written such a paper, touching on Shariah justifications of the TRS and philosophical analyses of Shariah law in general. It was also highly technical as well, with structure diagrams and complex mathematical formulae aimed to placate skeptical financial engineers. After the distribution of this White Paper, Deustche became one of the largest suppliers of the Wa'd-based TRS, at one point owning more than 99% of the market share.[35]

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[28] Irfan 160
[29] Atallah and Ghoul 83
[30] Atallah and Ghoul 71
[31] ibid
[32] Irfan 149
[33] El-Gamal, Mahmoud Amin. *Limits and Dangers of Shari`a Arbitrage* (n.d.): 1-13. *Rice University*. Web. 29 Apr. 2016. <http://www.ruf.rice.edu/~elgamal/files/Arbitrage.pdf>.
[34] Irfan 149-151
[35] ibid

3. Why now?

The TRS was introduced in 2007, right before the emergence of the Great Financial Crisis. In the periods running up to 2008, appetite for risk was high, and financial derivatives gained momentum as a way for conventional investors to speculate and take on sizeable risk. From 1999-2008 the derivatives market has grown by around 500% into a $200 trillion industry by Q4 of 2008.[36] This momentous growth has also prompted Western bankers to introduce and push derivatives into geographies that have previously little interaction with derivatives, like the Middle East.[37]

At the same time, the Islamic finance community has experienced a surge in financial sophistication. Ibrahim Warde argues that this was a result of the convergence in banking practices between Islamic and conventional banking.[38] For example, in lieu of a conventional bond that pays out interest, Islamic finance has developed products called sukuk bonds that instead issue rental payments, circumventing the riba issue. As another development in this convergent phase, Islamic and conventional bankers have focused their efforts on creating Islamic derivatives that mimic their conventional counterparts, yet remain consistent with Shariah law. In our case in particular, the Wa'd-based TRS is a modified version of the conventional TRS swap that is widely used in the global economy.

SECTION 4: The controversy over Islamic TRS

1. Controversy

The following section covers some of the contentions Shariah scholars and observers have with the Wa'd-based TRS. Underlying these contentions are debates on form versus substance, which will be further described in section 5. Skeptics suggest that TRS only satisfy Shariah law on paper, but clearly goes against it in spirit. In addition, some scholars find dispute with the form itself; the underlying structure itself is inherently inconsistent with Shariah law.

2. Usage of Wa'd

A Wa'd is a unilateral promise, but its application in Islamic finance raises disagreements among scholars. To some scholars, a promise is considered a morally and religiously binding contract, but is not legally enforceable because it is not considered a customary contract. To others, fulfilling a promise obligatory and can be legally enforced. Although a Wa'd does not refer to a formal contract under Shariah law, bankers and practitioners in the 70's have transformed a morally binding contract into a full-fledged legally enforceable contract. The Shariah committee of the Kuwait Finance House and Islamic Fiqh academy resolved in 1979 that a "unilateral promise is binding both morally and legally only upon the side that makes the promise."[39]

Although a unilateral promise is now considered legal under Shariah law, binding bilateral promises are considered invalid under Shariah precepts. Accordingly, a promisor cannot also act as the promisee. The Islamic Fiqh Academy argues that a binding bilateral promise is too similar to a conditional sales agreement (an agreement that A will sell an asset to B in the future,

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[36] Denning, Steve. "Big Banks and Derivatives: Why Another Financial Crisis Is Inevitable." *Forbes*. Forbes Magazine, n.d. Web. 29 Apr. 2016.
[37] Warde 149
[38] Warde: 80
[39] Ayub, Muhammad. "Use of W'ad and Tawarruq for Swaps in the Framework of Islamic Finance." Proc. of 8th International Conference on Islamic Economics and Finance. N.p., n.d. Web. 29 Apr. 2016.

but A does not currently own said asset), which is not allowed because it is analagous to selling an asset that one does not have.[40] Under Shariah law, one cannot sell what one does not own.

As detailed earlier, the Wa'd-based TRS requires promises by two parties. This would seem to suggest that a binding bilateral agreement would work best under this financial structure. However, bankers have cleverly required two unilateral promises rather than one bilateral promise. Instead of making one bilateral promise, the structure here asks the two parties to individually make a promise to the other. Islamic scholars, however, find contention with this condition; requiring two unilateral promises still situates the investor as both the promisor and the promisee, which is explicitly prohibited under Shariah law.[41] Such scholars believe that this is merely a mischievous exercise in and indulgence with semantics. To them, a bilateral promise is disguised under the usage of two unilateral promises.

Bankers and Sheikh Hassan argue that two unilateral promises are fundamentally different from a bilateral promise because only one unilateral promise can be executed at any given time.[42] As shown earlier, one promise will gain in value and the other promise will lose in value; therefore, only one promise can be employed to realize economic profit. As such, to the bankers and Sheikh Hassan, it is not technically a bilateral promise.

3. Sadd al-Dhara'i: Blocking Ostensibly Legitimate Means to Illegitimate Ends

There were concerns by the Islamic banking community that the usage of Wa'd-based TRS would allow for Muslim investors access to forbidden sources of revenue. For instance, a Muslim investor could initiate a deal that would allow him to access interest payments from a corporate bond, of which is explicitly forbidden in Shariah law. As a result, some finance practitioners like Nikan Firoozye noted that "with no such prohibition on the non-Muslim counterparty, almost anything was allowed."[43] This can then be seen as a way to exploit supposedly legitimate means to achieve illegitimate returns.

Hussein Hassan, the primary author of the White Paper, argues that the Wa'd methodology does not "inevitably lead to conventional exposures."[44] For instance, the structure detailed above could introduce a situation in which the Muslim investor does not gain from the non-halal asset. He then reasons that if such a means does not necessarily lead to an illegitimate outcome, then the underlying structure is valid.

The counter-argument purported by Hassan has been met with vehement criticism from Sheikh Yusuf Delorenzo, a prominent Shariah scholar. Sheikh Delorenzo reasons, "whatever leads to involvement in the unlawful will either lead to the unlawful as a certainty or lead to the unlawful as a possibility."[45] To him, whatever pathway which may lead to the unlawful, should be strictly prohibited. Delorenzo, in fact, also goes on further to argue that the TRS will *surely* lead to the unlawful.[46] By following the money, he reasons that this transaction can be

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[40] ibid
[41] ibid
[42] Atallah and Ghoul 87
[43] Firoozye, Nikan. "Featured Structure: Wa'd and the Completeness of Islamic Markets." Opalesque, 29 Apr. 2016. Web. 29 Apr. 2016.
[44] Irfan 156
[45] DeLorenzo, Yusuf. "The Total Returns Swap and the "Shariah Conversion Technology" Stratagem." (n.d.): 9. *UAE Laws and Islamic Finance*. Web. 29 Apr. 2016. <https://uaelaws.files.wordpress.com/2012/06/delorenzo-copy.pdf>.
[46] ibid

condemned unlawful in and of itself. That is, the underlying structure of the TRS is inconsistent with Shariah law.

4. Follow the Money

Sheikh Hussein Hassan argues that the flow of money to the Muslim investor is completely consistent with Shariah law because the money given by the investor is used to purchase nothing more than a Shariah-compliant asset.[47] Recall that on the return side, there are two possibilities: one is the gain from the halal asset, and the other is the gain received from the non-halal asset. The return, if derived from the halal asset, is clearly compliant with Shariah law. Sheikh Hassan argues further that the return derived from the non-halal asset is also compliant with Shariah law. He reasons that the non-halal asset is simply used as a benchmark to establish a price. The bank simply pays out its own money equal to the value of the benchmark. If the money is coming from the bank itself and not from the underlying forbidden asset, then there is nothing wrong with this transaction. He argues that "there are no reasons, in shariah, why an asset may not be sold at a price linked to the performance of a separate asset or index or other benchmark which may itself be sharia compliant or not." From our fictitious example earlier, Ali is not receiving the return from the underlying US Treasury; he is receiving the proceeds from a benchmark that is merely tracking the performance of US Treasuries. X (non-halal asset) does not equal Y (benchmark) in concept because Y is simply following the movements of X. Hassan argues further that this is no different than using LIBOR (London Interbank Offer Rate) as a benchmark.[48]

LIBOR is the most important international interbank benchmark rate — that is, the price at which banks borrow from one another. A LIBOR benchmark is used only to initially price an Islamic financial product. LIBOR is used to discount future cash flows for a financial product. According to Sheikh Hassan, LIBOR does not have any direct effect on the actual transaction itself and the cash flows that are generated from the product, and is therefore non-objectionable from a Shariah perspective.[49]

Sheikh Delorenzo, on the other hand, disagrees that the benchmark practiced in the TRS is similar in practice to the usage of the LIBOR benchmark. While LIBOR is a benchmark used to set a price, the TRS's benchmark is used to actually represent the final price. In a sense, the benchmark itself is the return. The main distinction between LIBOR benchmark and the TRS's benchmark is that the former is only used to calculate a price, whereas the latter is used as the price itself. Inherent in his argument is that he does not buy Sheikh Hassan's argument that the benchmark is a different entity from the underlying non-halal asset. If it looks like a duck, swims like a duck, and quacks like the duck, then it is probably a duck. Because the benchmark matches the performance of underlying non-halal asset, it cannot be viewed as two different entities. The benchmark does represent the non-halal asset. That is, X does equal Y, even if it "even if it does so synthetically."[50] This, in turn, means that when the investor agrees to exchange returns involving the non-halal benchmark, the investor implicitly indicates approval of investment in the non-halal assets, of which is forbidden under Shariah law.

DeLorenzo believes that the TRS should be condemned in and of itself, because "if the investment with the swap had not been made, those non-Shariah-compliant transactions would

[47] Irfan 156-160
[48] ibid
[49] DeLorenzo 3
[50] DeLorenzo 5

not have taken place."[51] To DeLorenzo, the investor's money, even though it rests in an SPV in halal assets, is actually put to work in ways that are not compliant with Shariah rules. For instance, the investor's money is used to provide an interest-bearing loan to a fund manager, which is explicitly forbidden. Moreover, the Muslim investor is implicated in "every investment decision, trade, and cash flow that the bank subsequently takes with his funds."[52] When the bank decides to hedge itself against the Wa'd-based TRS through the usage of bonds or forbidden derivatives, the Islamic investor is implicated in this forbidden trade, even though he may not be investing directly in the non-compliant instrument. To DeLorenzo, the TRS initiates a series of events that implicates the unwitting Muslim investor to participate in non-Shariah compliant investments, however indirectly.

DeLorenzo also offers a personified definition of money, by stating, "when you accept this investment product, you accept the whole series, whether you know it or not. As the money moves, its character changes."[53] The money that was initially invested for Shariah-compliant reasons may be used for entirely different means later on. The character of the money thus changes, and by proxy, the character of the transaction also changes in a way that becomes inconsistent with Shariah law.

5. Ramifications for the Industry

Sheikh DeLorenzo, amongst other scholars, is very concerned with the potential consequences that would result if the Wa'd-based TRS were to be validated. He contends that if consideration is not given to the underlying assets, it could mark the end of the need for authentic Islamic products and services. Why should a bank spend the time to offer a sukuk bond if it could simply structure a TRS deal that effectively yields similar outcomes? For less money and less time, the bank could offer a conventional bond as a non-halal asset benchmark, and pass off the interest payments to the Muslim investor in a Shariah-compliant way. In a sense, there is no need for Islamic finance if every conventional return, whether it be Shariah compliant or not, are deemed lawful under a Wa'd-based TRS. If the TRS structure is legitimized under Shariah law, Sheikh Delorenzo cautions that it may signal the "Doomsday … for Islamic Finance."[54]

6. Real Economies and Underlying Asset

Other scholars share Sheikh Delorenzo's concerns as well, but extend their concerns further to the transaction's connection to real economies. Harris Irfan, a banker who was heavily involved in the structuring of this TRS deal, was quite critical of the benchmarking practice discussed earlier:

> "Because the benchmark has nothing to do with the actual market value of the [underlying halal] shares, it's as if I promised to sell my house to you in a year's time proportionate to the rise in gas prices, even though gas prices have little to do with house prices."[55]

To Irfan, this is an arbitrary practice. Why should my return be derived from the comparison between two seemingly unrelated assets, which do not seem to have any real-world or relevant connection? Why should it be that I should gain on my Apple stocks because Treasury prices

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[51] ibid
[52] Irfan 157
[53] ibid
[54] DeLorenzo 8
[55] Irfan 153

have gone down? The seemingly unrelated nature of the halal and non-halal asset has raised questions on how this transaction is connected to the real economy. All that you are doing, according to Irfan, is betting on the relative performance of two assets that have nothing to do with each other.

Irfan is also concerned with the way in which the underlying halal asset is acquired. He argues that when the fund manager acquires the halal asset (Bryan buying Apple for our SPV), the fund manager typically chooses the public equity shares of a large multinational company, and is acquired solely because of their liquid commodity, something easily converted into cash. "That's their only real purpose, not their actual investment potential."[56] To Irfan, the rationale behind the purchase of halal assets pays no consideration to how it is connected to the real economy. It is acquired simply for convenience.

7. Speculation vs. Hedging

There are also concerns about that the Wa'd-based TRS would be used for speculation. Dusuki and Shabham, experts on Islamic hedging products, agree that swaps can be approved by their respective Shariah advisory bodies if, and only if, they are used as a hedging mechanism in risk management.[57] If the product were used to conduct speculative trading activities meant to generate profit, then the product is deemed unlawful and goes contrary to Shariah's objectives.

Atallah and Ghoul believe that this TRS is inherently speculative in nature, and would not be used for hedging purposes. They contend that by swapping the return of the two basket of assets, the Muslim investor is essentially betting on the outperformance of the non-halal asset over the halal asset, which is inherently speculative.[58] Ayub purports that "the reality is that … little part of … [swaps] is being used for genuine hedging."[59] He believes that investors use swaps such as the Wa'd-based TRS under the guise of risk management, only to hide their speculative purposes.

Although Atallah and Ghoul cite limited evidence to back their claims, their concerns highlight a greater industry-wide fear that derivatives would be used by Muslims for speculative purposes. Therefore, the acceptance of such a derivative would surely lead to proliferation of speculation in the Islamic community, ushering yet again the "Doomsday" scenario articulated by Delorenzo.

SECTION 5: FORM VERSUS SUBSTANCE DEBATE

The Wa'd-based TRS was ultimately condemned by the Islamic finance community and did not gain traction in its usage. The TRS was to usher in the next wave of financial sophistication, opening a new door for derivatives in Islamic finance. In addition, the approval of the swap would allow for further diversification possibilities for Muslim investors, and would lead to a further convergence between Islamic and conventional banking methods. But why was this product not approved? Condemnation of this product can best be understood through the lens of the form versus substance debate. That is, Shariah scholars simply follow the letter of the law without necessarily paying heed to the spirit of the law.

I argue that the collective condemnation is driven primarily by substance considerations. The Wa'd-based TRS goes so far against the spirit of the law that it establishes a precedent that

[56] ibid
[57] Ayub 17
[58] Atallah and Ghoul 82
[59] Ayub 14

can ultimately delegitimize the need for Islamic finance altogether, paving the path for its own dismantlement in importance and practice.

The form versus substance debate did not arise out of a vacuum; since the 80s, it was the trend of practices by Shariah scholars that brought this debate to the forefront of the Islamic finance community.

1. Shariah Scholars

The early stages of Islamic finance saw actors creating and practicing Islamic finance without religious oversight. Saeed bin Ahmad al-Lootah founded the Dubai Islamic Bank in 1975, the world's first for-profit commercial Islamic bank, with no oversight from trained religious scholars. Instead, he used his own knowledge of commerce and shariah to design products that he believed was compliant with Islamic law.[60] Without oversight, these actors and entrepreneurs could potentially design whatever product they want, perhaps intentionally or accidently going against religious precepts. The early stages also saw players acting in bad faith. In the 1980s, Egypt saw the proliferation of Islamic Money Management Companies (IMMCs). Although these entities advertised themselves as Islamic, they were involved in financial speculation and in the black market industry, implicating unknowing Muslim investors in transactions that Shariah law explicitly prohibits.[61]

The first Shariah board surfaced in 1976 under the Faisal Islamic Bank of Egypt. The bank appointed a panel of shariah scholars to oversee the implementation of Islamic law to the bank's business model and products.[62] These scholars helped the bank avoid interest and guided the firm away from other unlawful financial activities. They not only helped guide banking practices, but also legitimated Islamic banking. Customers could not really know for certain whether their involvement with the Dubai Islamic Bank or IMMCs was truly compliant with Shariah precepts. By institutionalizing the relationship of well-known Shariah scholars with emerging Islamic banks, customers felt more confidence in the religious-compliancy of such banks. The emerging institutionalizations that took place in the 70s and 80s ushered in what Kahf calls a "new power alliance between wealth and scholarship,"[63] where wealthy Muslim bankers and Shariah scholars formed a newfound nexus of power that spawned the emergence of Islamic finance.

Calder notes that these institutionalizations have ushered in a "new regime of ethical certification."[64] To ethically certify these products, a confluence of "actor-network of expert technicians, abstract rules derived from classical Islamic jurisprudence, algorithms, and other calculation devices"[65] combine to form what Calder calls a "shariah-compliance apparatus."[66] His apparatus, in turn, certifies the "Islamicity" of a financial product. The crux of this apparatus lies in the adjudication of Shariah scholars; they have the final say on whether a product is Islamic or not.

2. The Emergence of Technicalities

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[60] Calder, Ryan. 2014. "Sacred Profit: A Sociology of Islamic Finance." Pp. 96–228
[61] Warde 77-80
[62] Calder 139
[63] Kahf, Monzer. 2004. "Islamic Banks: The Rise of a New Power Alliance of Wealth and Shari'a Scholarship." Pp. 17–36 in The Politics of Islamic Finance. Edinburgh: Edinburgh University Press.
[64] Calder 159
[65] ibid
[66] ibid

One of the first initiatives that came out of the "shariah-compliance apparatus" was to design Islamic banks to depend on profit-loss sharing schemes rather than receiving interest;[67] risk-sharing rather than risk-shifting.[68] This was seen as a fairer form of banking than conventional interest-based banking. Instead of receiving fixed revenue regardless of the performance of the borrower -- which is perceived as unfair to the borrower -- Islamic banks would instead act like private equity and venture capital funds, receiving differing levels of revenue depending on the success or failure of the borrower. As a result, the incentives of the borrower and the bank are aligned in the risk-sharing scheme, leading to a mutually beneficial venture. During this era, Islamic finance was defined by its risk-sharing initiative, emphasizing fairness.

The newly created risk-sharing business model was not met with success.[69] Islamic banks were failing because it provided loans to risky businesses with low probabilities of return; "whenever banks ventured into that terrain, they lost money."[70] Amidst rising levels of globalization and competition, these Islamic banks were losing ground and profitability to conventional banks, threatening the existence of Islamic banks.

As a result, Warde argues that a new form of pragmatism emerged to challenge the "dogmatic fixation on riba-as-interest,"[71] setting the stage for an increasing convergence between Islamic and conventional banks. To certain Shariah scholars, there must be some concessions or new understandings on the definitions of interest if the industry were to survive at all.[72] Calder provides the process in which this new pragmatism was practiced. He argues that a cyclical mechanism has driven Islamic banks to make ethical concessions, choosing more profitable options that technically comply with Shariah's formal requirements over less profitable options that ban interest altogether.[73]

Such "ethical tradeoff" is evident in Islamic bank's acceptance of the modern murabaha. A modern murabaha is a mark-up sale of an underlying asset, where a bank acquires an asset and sells it at a premium to a borrower on a deferred payment schedule. This structure compensates the lender for the time value of money, while having the religious benefit of technically avoiding the formal definition interest.[74] Instead of calling the notional amount above principal interest, it is instead called profit. Shariah scholars, like Sheikh Nizam Yaquby, would argue that profit is technically different than interest, so this transaction can be deemed valid. God himself stated that trade is lawful, but riba is not (profit from buying and selling is lawful, but interest is not).[75]

Not all were happy that the modern murabaha became the industry standard. Contenders see the validation of the murabaha as a mere exercise in semantics. They see this form of financing as economically identical to a conventional interest-bearing loan; they argue that although the murabaha may satisfy Islamic law by the letter, it negates the intent behind that law. Moreover, scholars like El-Gamal contend that the growing emphasis on following the letter of the law has encouraged the industry to simply "find the closest approximation to conventional

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[67] Warde 72
[68] Calder 99
[69] Warde 73
[70] ibid
[71] Warde 80
[72] ibid
[73] Calder 80
[74] Calder 103
[75] Quran 2:275-280

financial practice which can be deemed to avoid forbidden elements."[76] El-Gamal is highly critical of the tendency of Shariah scholars to simply replicate conventional products by "Islamicizing" the semantics and internal structure of the financial product.

As a response to the failures of risk-sharing, Islamic finance came to be defined by risk-shifting practices that remain technically legal under Shariah law, ushering in the dominant narrative to emphasize form over substance. This trend and debate can also be seen in newly devised Islamic products as well. Products such as takaful, organized tawarroq, and Islamic home mortgages are some salient examples.

3. Review of Form vs. Substance (theory)

A contention often aimed at Shariah scholars today is that they too often take a formalist of an approach to certifying and structuring Islamic financial products. One the one hand, consequentialists argue that economic substance of a financial transaction is fundamentally important in determining whether a product is truly Islamic. They argue that the "economic and social consequences of a transaction greatly affect its religious valence."[77] How does it affect the real economy? Is it truly embedded in the real economy? Does the transaction produce a net gain for society? To consequentialists, not only is it necessary that the financial products follows the letter of the law, it should also follow the spirit of the law and advance the ultimate objective of Islamic law (equity, fairness, justice, connection to real economy).

El-Gamal offers one consequentialist argument.. As shown earlier, he is vehemently critical of Shariah scholars' practice of replicating conventional financial products but replacing its internal structure with an Islamic flavor. He put it thus:

> "by approving and eventually codifying legal strategems to replicate conventional financial practices, jurists and bankers eventually drown the substance of Islamic law in their contemporary reconstructions"[78]

To him, the act of replication dilutes the substance of Islamic law. For instance, interest was banned from the religion due to fairness consideration. In the modern murabaha, interest was substituted with marked-up profit. At the end of the day, that newly coined profit terminology still fundamentally acts identically to interest. Substance-wise, nothing changed. The act that was banned in Islamic finance thus came to be accepted under a different name.

On the other hand, most elite Shariah scholars argues that adhering to Shariah formalism, or following the letter of the law, is the true language of Islamic piety.[79] By technically following the letter of the law, Shariah scholars are able to approve and design financial products that replicate their conventional counterparts. This, in turn, allows for Islamic finance to effectively compete with conventional finance. Shariah scholars contend that if they were not able to practice their technical and formalistic approach, Islamic finance would lose out to conventional banking altogether.

In addition, these scholars argue that Shariah formalism is the only "scientific and rational language of piety,"[80] because it is heretical to assume the spirit of the law. It is

[76] El-Gamal 2
[77] Calder 168
[78] El-Gamal 10
[79] Calder 169
[80] ibid

impossible to divine God's intention behind His laws. How can one really know what God is thinking? Should one even question what God is thinking? These Shariah scholars believe it is best just to apply the laws that are given by God (that is, stick to the letter of the law), rather than "pontificating unscientifically about what His intentions might have been."[81]

4. Form vs. Theory (applied)

How do the scholars and players mentioned in the Wa'd-based TRS fall in the form versus theory debate? Sheikh Hussein Hassan, the main structurer of the product, would argue that his TRS follows Islamic law both in form and in substance, and therefore should be compliant. On a technical and formalist level, nothing is breached under Shariah law. For instance, since one promise can only be executed in this TRS, it should not be considered a bilateral promise (of which is condemned in Shariah law). Substance-wise, real assets are being acquired, thus embedding the TRS into the real economy (Apple being acquired by Bryan).

To Gerrard Bossuyt, head of the Wa'd-based TRS structuring team, this product has a strong substance claim.[82] Validating this product will mean that Islamic finance will be able to compete with conventional finance as equals rather than at a disadvantage. With TRSs under their arsenal, Islamic financiers will be able to easily hedge out their risks and diversify their portfolio as effective as their conventional counterparts. Moreover, the approval of this TRS will create a strong precedent for creating ever-more advanced and complex derivatives in the future, leading to greater sophistication in risk-management.[83] This, in turn, will lead to a stronger foundation for Islamic financial markets in the future. As Islamic banking expands further in market size and sophistication, it will be able to serve more Muslim clients, thereby creating societal benefits to the whole Muslim society.

Ayub would agree with Bossuyt that the validation of this product would lead to the proliferation of derivatives in the future. But Ayub would disagree with Bossuyt by arguing that these derivatives would only be used for speculative rather than hedging purposes. To him, if this product were to be approved, it would legitimize the act of speculation altogether, which is wholly inconsistent with Islamic law.

Ayub, Atollah, and Ghoul would half-heartedly concede with Hassan that this transaction does follow it in form, but would differ in their opinion on the validity on the substance dimension of the product. Atallah and Ghoul in particular argue that this product is "highly controversial because it gives Muslim investors access to non-halal returns."[84] As noted earlier in section 3.1, this TRS can introduce a scenario in which an investor receives a return from a benchmark linked to a non-halal asset. To them, substance-wise, receiving a return linked to a performance of a non-halal asset is identical to receiving a return from the non-halal asset itself.

DeLorenzo echoes a similar sentiment, but he represents the most critical adjudicator; he argues that this product contradicts with Shariah law in form and in substance. He argues that by following the money, we can see that this TRS deal involves interest and leads to a series of events that is inconsistent with Shariah law. In substance, DeLorenzo issues a similar line of thought as Atollah and Ghoul; all are concerned that the acceptance of this transaction would legitimize non-halal returns. But DeLorenzo extends this concern further. If any forbidden sources of income are legitimized under this transaction, any Muslim investor can theoretically

[81] ibid
[82] Irfan 141-149
[83] ibid
[84] Atallah and Ghoul 71

receive exposures to interest, returns from risky hedge funds, and even returns from a pornography or pork industry. If this phenomenon were to surface, then there is no point for having Islamic finance at all.

Why was the Wa'd-based TRS so energetically condemned by the scholar community? Although there is a wide array of issues under the form and substance debate, the most critical concern is the substance issue of legitimizing forbidden returns. I argue that by accepting the Wa'd-based TRS, it undermines the spirit of the law so deliberately that it threatens to negate the need for Islamic finance altogether. By purely structuring TRS to comply with the letter of the law (as they understand it), the Deutsche structurers have turned the spirit of the law on its head by legitimizing avenues that are explicitly prohibited in Islamic law. No longer are returns from a risky corporate bond limited to aggressive Muslim investors. No longer are alcohol sales prohibited to Muslim business owners. The list continues. If these sources of forbidden returns were to be unlocked, then what is the point of having Islamic finance? Why should we keep creating a system where the rules no longer matter and can be circumvented with ease?

The modern murabaha was accepted in part because there was a real effort in the scholarly community to circumvent the interest issue so as to compete with conventional banks. That is, there was a clear motivation to create an Islamic system of finance as a distinct entity from conventional banking. The acceptance of the Wa'd-based TRS, however, could sever that distinction altogether. The validation of such a product would not only converge Islamic and conventional banking, but also in practice merge into one single entity. All the rules as advanced by Shariah law could be simply circumvented by using the Wa'd-based TRS. And by extension, the Wa'd-based TRS undermines Shariah law altogether by directly legitimizing forbidden avenues of investment.

Conclusion:

As noted earlier, the ethical stakes on the validation of this financial product are substantially high, as the approval of such products may erode the need for Islamic finance altogether. The profit motive has compelled bankers and scholars to work together to devise new financial instruments. For the bankers, the sale of these new financial instruments would mean higher profits for their groups, and thus their bonuses. The scholars as well are monetarily compensated for their guidance in structuring these products. These scholars, like Sheikh Hussein Hassan, sit on the boards of major Islamic banks, and receive honorariums every year.

The profit motive would suggest that scholars should be lax in their judgment of approving products. The more products they approve, the more income they would earn on their consultations. This then leads to one pronounced criticism of the Islamic finance industry: how can shariah scholars protect the integrity of Islamic law if they are compensated by the industry that they regulate. Yet scholars take their professions seriously, as they face criticisms from others scholars and defend their own scholarly prestige. Sheikh Yaquby, a scholar mentioned earlier in this paper, suggests the following:

> "You have to understand that if I did not do my duty and approved a product that was not truly shariah compliant, my fellow scholars would immediately question me. So I cannot be unfaithful to shariah"[85]

[85] Calder 175

Ruling in a way that is inconsistent with Islamic law would welcome open attacks from other shariah scholars. In our case, Sheikh Hassan had to face tough criticisms from Sheikh DeLorenzo. Shariah scholars must therefore ground their conclusions within the longstanding discursive tradition of classical Islamic jurisprudence, while finding avenues to adapt Islamic law to pressing and changing contemporary conditions. It is this interplay amongst scholars, balancing between progress and religious integrity, that has factored into the ethical complexity and intense debates over one particular financial product.

Appendix A:

[1] Let us assume two individuals, C and D. C initiates a bet with D. The bet goes such that if Apple's stock price goes down by $5, then C pays D $20; if not, then D pays C $20. At the end of this bet, it is a simple transfer of existing wealth between two parties. However, if C and D go out to the market and buy Apple stock, C and D are given voting and participatory rights to Apple's decision-making process. Thus, they are participating directly with Apple and with the real economy, and are given the ability to contribute to Apple's business plan to create new economic wealth.

Appendix B:

	Real 10 Year US Treasuries	Treasury Benchmark
Price in Year 0	$130	$100
Price in Year 1	$150	-
Percentage Change	15%	-
Final Price for Both in Year 1	$150	$115

For instance, let's assume that a 10 year Treasury is trading at $130, but we need our benchmark to equal $100 in order to comply with the details of the transaction. In one year's time, the price of the real treasury went up to $150, netting a 15% gain That 15% gain would thus be transferred over to the benchmark as well. Now, the benchmark is worth $115.

Appendix C:

In the second scenario, the halal asset underperforms the non-halal asset. Let us assume that in year 1, Apple is now worth $100, but the Treasury benchmark is now worth $110. Bank X would not like to exercise his promise because he would have to buy Apple at $110. When Bank X sells it back to the market, he loses $10 on this transaction. Ali, however, would like to exercise his promise. Ali could sell his Apple stocks at $110, netting a $10 gain. In this case, Bank X would gain nothing. As a result of how the promises are structured, only one promise can be economically beneficial and exercised at the time of maturity.