Ethical Investment in the Stock Market: *Halal* Investing and *Zakat* on Stocks

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Abstract

Islamic finance is the fastest growing segment of the global financial system and has been experiencing an impressive double-digit growth in recent history. Following the growth trend of Islamic finance, a rapidly rising affluent and well-educated *Muslim* middle class from the Islamic world and Western countries is aspiring to match finance with faith and fueling demand for Islamic investments. This paper examines how *Muslim* investors can invest in the contemporary stock market in a way completely compatible with the letter and spirit of divine Islamic law or *shariah*, and how Islamic investment is considered for *zakat*—a religious obligation to donate to the poor and needy a certain percentage of wealth. The conditions laid down by *shariah* make *Muslim* investors' participation in the stock market a special case of ethical investment. This paper discusses a qualitative screening process to identify stocks of companies that are engaged in business or activities permissible (*halal*) in *Islam*, and a quantitative screening process utilizing financial ratio analysis to allow companies in permissible business to use a tolerable level of interest-bearing securities and associated interest income and expenses. Stocks of companies passing these tests are designated as *shariah*-compliant stocks or *halal* investments and these stocks form the investment opportunity set for *Muslim* investors. The paper then focuses on how to cleanse investment income from *shariah*-compliant stocks contaminated by income from impermissible (*haram*) sources and concludes with a discussion of two opinions of Islamic jurists and *shariah* scholars on treatment of investment in stocks for *zakat* calculation.

Keywords: Islamic finance, Islamic economics, Islamic wealth management, Islamic stock index, ethical investment, Islamic mutual funds, *shariah* stock screening, pure or permissible (*halal*), impure or impermissible (*haram*), *shariah*-compliant stocks, *halal* investing, and *zakat*.

JEL Classification: A13, G23, Z00

I. Introduction

By investing money in the financial markets instead of spending it now, individuals trade off certain current consumption for a larger uncertain future consumption. Investment is a current commitment of funds for a period of time in order to generate future cash flows that will compensate for the time the funds are committed and for the risk associated with future cash flows. *Islam* not only permits, but also encourages trading, investing, and sharing moderate level of risk. The *Qur'an*—the sacred text of *Islam*—states: “Believers, do not consume your wealth among yourselves in vanity, but rather trade with it by mutual consent” (*Qur'an* 4:29). This verse is an unambiguous reference to investing. However, investment must be fully compatible with the letter and spirit of divine Islamic law or *shariah*. Stocks issued by publicly traded companies are tools of investment. According to Islamic jurists

and *shariah* scholars, investing in the contemporary stock market is permissible provided certain conditions of *shariah* are met. This investment is a special form of partnership between the users of capital—business entrepreneurs and the suppliers of capital—investors or shareholders (Al-Zuhayli, 2003). Although investment is generally encouraged in *Islam*, the simple fact that a company is offering an investment opportunity does not mean that the nature of its business, every aspect of its operations, and its financial activities are in full conformity with *shariah*.

The purpose of this paper is to examine how individual *Muslim* investors can invest in the stock market in ways consistent with *shariah*, and how these investments are subject to *zakat*. The demand for *shariah*-compliant investment opportunities has been rising very rapidly with the growth of Islamic finance—the fastest growing sector of the global financial services industry. A research report published by KFH-Research, a subsidiary of Kuwait Finance House, one of the leading global Islamic financial institutions, forecasts total Islamic finance assets will reach $2.1 trillion by the end of 2014, and total assets of the Islamic banking sector will reach $1.6 trillion (Yahaya *et. al.*, 2014). A growing affluent and well-educated *Muslim* middle class in the Islamic world and Western countries who want to hold fast onto their religious standards has created increased interest in Islamic investment. The focus of this paper is not on Islamic institutional investors, but rather on the individual *Muslim* investors who may be struggling while investing in the stock market in a *shariah*-compliant way and thereby to match their finance with their faith. Several prior studies examined *shariah*-compliant investing from the perspective of institutional investors such as Islamic mutual funds and index funds (Derigs and Marzban, 2008, and Mahfooz and Ahmed, 2014). There is no prior research in the extant literature examining the investment opportunity set for individual *Muslim* investors in the financial market. This paper fills this void in the literature.

The institutional investors have the resources, expertise, and economies of scale to implement *shariah* conditions efficiently and properly while investing in the stock market. Furthermore, prior empirical research studies of portfolio performance of conventional mutual funds and pension funds (Jensen, 1968, Lee and Rahman, 1990, 1991, 1994, Chen *et. al.*, 1992, Coggin *et. al.*, 1993) showed that these institutional investors are not superior performers in the stock market on a risk-adjusted basis.[1] However, the individual investor has the personal choice to invest directly in the stock market or indirectly via mutual funds. Additionally, direct investment is more tax efficient as investors can delay potential tax on

capital gain by not realizing the gain until the beginning of next tax year and thereby pay less tax in present value or avoid tax on dividends by selling a stock before it goes ex-dividend. Mutual fund investors do not have any control over accepting capital gain and dividend income from the fund's investments as fund managers make these decisions and pass them on to investors before the end of the tax year.[2] This paper is organized as follows: section II discusses how *shariah*-compliant investment is a special case of ethical investment, section III discusses in greater detail the permissibility of investing in the stock market, and section IV discusses screening tools employed to identify stocks of *shariah*-compliant companies. Section V focuses on purification of investment income partially contaminated by income from impermissible sources, and section VI discusses how investment in the stock market is treated for *zakat* purposes. Section VII concludes the paper.

II. A Special Case of Ethical Investment

Ethical investing, more popularly known as sustainable, socially conscious, "green" or socially responsible investment (SRI) is the application of ethical as well as financial considerations or screens in investment decision-making. It is an investment strategy based on normative ethical and social values. According to Cowton (1994), ethical investing is "the exercise of ethical and social criteria in the selection and management of investment portfolios." Ethical investment has been defined as putting your money where your morals are, or investing according to your beliefs (Brownlow, 2009). Traditional investment is driven by only financial considerations such as maximizing return or wealth, diversifying risk, and maintaining liquidity. Ethical investing is driven by societal needs and benefits and takes into account non-financial criteria, such as certain attributes of the companies in which money is invested, in addition to the financial considerations of traditional investors. Ethical considerations may include, among others, religious affiliations, beliefs, or values.[3] Knoll (2002) pointed out that ethical considerations might be a screening process or a variable in the selection process. Screens can be either negative (exclusionary) or positive (inclusionary). Negative screening excludes companies that are incompatible with the investors' ethical values while positive screening seeks out companies that act in a manner consistent with the investors' ethical values. Examples of negative screening include excluding companies that are engaged in gambling, pornography, production and distribution of alcohol, tobacco, and weapons, employing under-age workers, damaging the environment, and exploiting animals for cosmetics and apparels.

Examples of positive screening include investing in companies that promote environmental improvement, pollution control, community engagement, energy conservation, sustainability, consumer protection, human rights, diversity, and other stakeholder-friendly activities as well as companies serious about product safety, improved working condition for employees, seeking renewable energy to replace fossil fuels, *etc*. Ethical investing aims at rewarding ethical corporate behavior through positive screening and rebuking unethical corporate behavior through negative screening. Assets under management (AUM) of global ethical investment funds climbed to $13.6 trillion at the start of 2012, a 22% increase since 2010, according to Global Sustainable Investment Alliance (GSIA), and this represents 21.8 percent of the total global AUM (Global Sustainable Investment Alliance, 2013).

The conditions laid down by *shariah* make Islamic investment a special case of ethical investment. While comparing Islamic investing and ethical investing, Bennettt and Iqbal (2013) observed that both these types of investors seek to achieve both a strong economic return on their investments and the social returns the society receives from their money being used in compliance with their beliefs. It appears that Islamic investment and ethical investment both share some common values in investment philosophy. For example, the principle that a person should not profit from activities that he or she believes to be immoral—a core tenet of Islamic investment—is shared by ethical investors of all traditions (Rehman, 2010). Moreover, both Islamic and ethical investment avoid companies that are considered harmful from a social and community perspective. Classical Islamic economic theory holds that the earth's resources are to be used for the benefit of the community as a whole. This idea is very much in line with the fundamental tenet of Islamic economic theory, that is, it is the duty of mankind to care for the world's resources and to hold them in stewardship, or trust, for future generations (Brownlow, 2009). The *Qur'an* described humans as trustees (*khalifa*) of the earth on behalf of God ("For He it is Who has appointed you vicegerent over the earth." *Qur'an* 6:165). Resources of the earth are a trust from God and trustees are responsible for proper and efficient management of these resources. Rice (1999) noted that this concept of trusteeship is compatible with models of sustainability and environmental stewardship. The concept of sustainable development does not regard resources of the earth as free goods to be fully consumed at the free will of any nation, generation or individual without leaving anything for generations to come. *Shariah*-compliant investment also shares with other faith-based ethical investment initiatives

many universal ethical principles such as honesty, trustworthiness and caring for the deprived ones in society.[4]

Islamic finance is based on certain ethical principles and one's financial activities must be compatible with his or her overall ethics and values (Rehman, 2010). First, one cannot benefit from something immoral. For example, gambling, pornography, production and distribution of tobacco and firearms are unethical and investing in stocks of these companies, therefore, is prohibited. Second, to earn return, one must take risk. For this purpose, one of the basic principles of Islamic finance is: "no risk, no gain" (Chapra, 2008). The supplier of capital and the user of capital must share profit and loss as well as risk. The guaranteed return in the form of interest on a loan without regard to the outcome of the venture is considered exploitative and burdensome on the borrower and thus receiving interest by investing in bonds or paying interest by borrowing is prohibited. The prohibition of interest aims substantively to protect individuals from getting excessively indebted, as well as paying or receiving unfair compensations for receipt or extension of credit (El-Gamal, 2006). The prohibition of interest makes investing in stocks of financial companies such as banks, mortgage companies, and finance companies, and trading on margin impermissible. Trading on margin is buying stocks with less than 100 percent down payment and borrowing the rest from the broker at an interest rate. As per *Shariah* Standard No. 21 of AAOIFI, "it is not permitted to purchase shares by raising interest-bearing loans through a broker or another (margin sales), just as it is not permitted to pledge the shares for such a loan." The prohibition of interest also makes investing in interest-bearing (*ribawi*) securities such as corporate, government, and municipal bonds impermissible.

The prohibition of interest leads to a prohibition of trading or transfer of debt at other than nominal or face value. In conventional financial markets, bundling and unbundling of cash flows from interest-bearing securities through "financial engineering" is pervasive. Examples are asset-backed securities (ABS) created from a pool of mortgages, credit card loans, accounts receivables, auto loans, or student loans and taking this one step further by creating collateralized debt obligations (CDOs) from these ABS. These CDOs are several steps removed from their underlying assets—the original loans. According to Rehman (2010), "opaqueness in the transfer of debt, misleading ratings regarding the quality of the debt, and misaligned incentives between the originators of debt and the ultimate holders of the debt have,

however, all been cited as key causes of 2008-2009 global financial crisis." Rehman (2010) added that "the ban on trading and selling debt is the clearest manner in which Islamic finance principles proscribe certain practices that led to the financial crisis."

Third, one cannot sell what one does not own and thus short selling (selling stocks or other financial securities that one does not own) is impermissible in *shariah*. As per *Shariah* Standard No. 21 of AAOIFI, "it is not permitted to sell shares that the seller does not own and the promise of a broker to lend these at the time of delivery is of no consequence." The mechanism involves borrowing the stock through the broker from an investor who owns it and selling it to another investor. At a later date the short seller repurchases the stock in the market and returns to the party from whom it was borrowed. The purpose is to profit from decline in the price of the stock. While buying a stock is based on future prospect and earnings potential of a company, short selling is based on the speculation that the stock price has gone up substantially and now is likely to lose momentum to rise any more. This speculative behavior adds to stock price volatility and puts downward pressure on stock price. Rehman (2010) pointed out that "at the height of the financial crisis in 2008–2009, US market regulators introduced temporary bans on short selling stocks in the financial sector. Presumably, this was to prevent the shares of major banks from falling even further after their precipitous declines. Regulators took the view (at least temporarily) that short selling was unhealthy for the market and excessively destabilizing."

Fourth, in a transaction between two parties, each party must fully disclose complete information relating to the price and the item being exchanged, the absence of which will cause excessive uncertainty or *gharar* due to information asymmetry. El-Gamal (2006) noted that "*gharar* encompasses some forms of incomplete information and/or deception, as well as risk and uncertainty intrinsic to the objects of contract. Thus, *gharar* incorporates uncertainty regarding future events and qualities of goods, and it may be the result of one-sided or two-sided and intentional or unintentional incompleteness of information." Warde (2010) observed that "in today's financial environment, *gharar* is pervasive since it encompasses deceptive ambiguity, asymmetrical information, risk-shifting strategies, and all forms of excessive and unnecessary risk-taking, which are akin to betting and speculation. To quote Nassim Taleb 'the glib, snake-oil façade of knowledge' promoted by finance professionals in a way designed to obfuscate and encourage investors to take risks they do not understand.[5] George Akerlof's 'lemon theory' discusses the

consequences of asymmetrical information – an endemic problem in finance since those who design and sell complex instruments have an edge over those who buy them. As for shifting of risk to others (or to society at large) and the tendency to privatize profits and socialize losses, it was a fixture of designing of complex credit derivatives such as collateralized debt obligations (CDOs) and credit default swaps (CDS) leading up to the financial meltdown of 2008, when years of accumulated profits and bonuses resulted in the near collapse of the global economy." Islamic investors are not permitted to invest in these "toxic" securities of the conventional financial market.

Conventional insurance is considered impermissible because of the presence of *gharar*. The terms associated with the insurance policy and payment scenarios have been deemed to be insufficiently precise—the buyer may know what premium he or she is paying, but whether a claim will ever be made, what the amount of that claim will be, and when it might be made are all unknown (Rehman, 2010). One implication of this principle is that investing in conventional insurance companies is not permissible. However, investing in *takaful* companies, a *shariah*-compliant alternative to conventional insurance, is permissible. A *takaful* company is mutually owned by the policyholders who pay insurance premium periodically and share profits and losses after paying for claims of unfortunate fellow owners who suffer losses.

Mishkin (1997) argued that asymmetric information, a situation in which one party to a financial contract has much less accurate information than the other party, is a crucial impediment to the efficient functioning of the conventional financial market. For example, borrowers usually have much better information than lenders about the potential returns and risk associated with the investment projects they plan to undertake. This asymmetry of information results in adverse selection and moral hazard. Adverse selection occurs before the transaction takes place: borrowers with high credit risks are likely to most actively seek out a loan. This happens because the individuals and firms with the riskiest projects are willing to pay the highest interest rates since they will reap the benefits if the project succeeds and default if the project fails. Thus, the parties who are most likely to produce unwanted (adverse) results are most likely to be selected. Moral hazard occurs after the transaction takes place because the lender faces the risk that the borrower will engage in activities that are undesirable (immoral) from the lender's perspective—that is, activities that make it less likely that the loan will be paid off. Moral hazard results

from a borrower's incentive to invest in high-risk projects in which the borrower does well if the project succeeds but the lender bears most of the loss if the project fails. Lenders can minimize adverse selection through carefully screening out borrowers which may not be in the best interest of their profit maximization objective. Alternatively, they can mitigate impact of adverse selection by diversifying across a large number of (high risk) borrowers. Thus, they would generally allow large number of customers to borrow excessively if the expected rate of repayment remains sufficiently high to ensure profitability (El-Gamal, 2006). Lenders can minimize moral hazard by imposing restrictions (restrictive covenants) on borrowers. However, monitoring and enforcing restrictive covenants are costly. Another innovative way to solve the problems created by adverse selection and moral hazard is to securitize loans by creating tradable securities such as asset-backed securities (ABS), and collateralized debt obligations (CDOs) and thereby shift the entire burden of losses to the ultimate buyers of these securities. Lenders can also resort to derivatives like credit default swaps (CDS) to seek protection against default risk (Chapra, 2008). It is interesting to note that a financial institution's derivative trading desk is intended to manage risk. However, because of lust for windfall profit and personal gain, these human trading machines may switch from hedgers to speculators and destroy the entity. The history of the modern financial market is filled with true stories about these unconventional risk-loving characters causing near collapse of global financial market. All these problems in the conventional financial system are the by-products of interest-based (*ribawi*) debt financing which is prohibited in Islamic financial system.

El-Gamal (2006) brilliantly explained the Islamic finance solutions to impose restriction on the means of transferring credit and risk that are at the heart of conventional finance, without which the conventional economic system cannot operate, through prohibition of *riba* and *gharar*. El-Gamal (2006) stated: "In finance – the forbidden *riba* is essentially 'trading in credit,' and the forbidden *gharar* is 'trading in risk,' as unbundled financial products. In other words, Islamic jurisprudence uses those two prohibitions to allow only for the appropriate measure of permissibility of transferring credit and risk to achieve economic ends. As many observers and practitioners in financial markets will testify, trading in credit and risk (perfected through derivative securities) is as dangerous as twirling a two-edged sword. Although those instruments can be used judiciously to reduce risk and enhance welfare, they can easily entice otherwise cautious individuals to engage in ruinous gambling and extremely speculative behavior. While

financial regulators seek to limit the scope of credit and risk trading to prevent systemic failures, Islamic jurisprudence introduces injunctions that aim also to protect individuals from their own greed and myopia. Individuals engage in myopically excessive borrowing behavior if left to their own devices." Secular regulators are primarily interested in protecting the financial system from sudden collapse and the welfare of individual borrowers is auxiliary to their prime objective. Protection of individuals who borrow recklessly is at the mercy of the personal bankruptcy law. Tax-deductibility of interest expenses for home mortgage makes it more tempting to over-leverage and live beyond one's means. Apparently, bank loan officers may be able to protect individuals from falling into the trap of borrowing excessively. However, they work for lenders and because of the "law of large number," they are able to diversify across a large number of borrowers to protect the lender's bottom line and they totally disregard how excessively indebted individual clients are. Prohibition on *riba* serves as an effective deterrent to guarantee that individuals do not abuse the availability of credit to their own detriment.

El-Gamal (2006) observed that "restrictions imposed by regulators and financial professionals require supplementary protections for individuals against their own irrational behavior – a function that can be fulfilled by religious law. In this regard, it is well documented in psychological and behavioral economic research that humans exhibit fundamental forms of irrationality in time preference, against which precommitment mechanisms (including those based on religion) can protect them." Loewenstein and Prelec (1992) and Thaler (1981) showed that humans tend to exhibit "dynamically inconsistent" behavior while discounting future benefits and losses which is known as "discounting or time preference anomalies" and it has a great impact on their saving, spending, and financing habits. A person with "irrational time preference" may keep borrowing to increase current consumption while heavily discounting long-term future consumption and ignoring the need to save for uncertain "rainy days" in the future until he or she reaches a point when it becomes necessary to seek protection from personal bankruptcy law. Religious proscription (in the form of a ban on interest) plays an important role in providing the fiscal discipline that an irrational human being needs to keep his or her financial house in order. In other words, the Islamic finance principle of risk-reward sharing instead of charging or paying a pre-determined fixed interest can be a brake on greedy and irresponsible behavior.

Chapra (2008) argued that the primary cause of financial crises that have plagued countries throughout the world over the last three decades is the lack of adequate market discipline in the conventional financial market. Banks lend excessively and imprudently to maximize their profits. Tax deductibility of interest expenses and protection of bankruptcy law motivate borrowers to over-leverage and live beyond their means. Banks reduce the risk associated with excessive lending through collaterals, selling debt, and transferring risk via the derivatives. Banks' investors (mainly depositors) who are supposed to discipline banks for excessive lending fail to do so because deposit insurance guarantees their principal. The lack of monitoring by the suppliers of fund makes the banks less careful in properly screening the borrowers. In the absence of risk/reward sharing between the banks and their borrowers (because of collaterals, debt sale, and derivatives trading) on the one hand and between the banks and their investors (because of deposit insurance) on the other hand, there is no built-in mechanism in the system to restrain excessive credit creation in the market. Excessive lending and borrowing lead to an unsustainable boom in asset prices, an artificial rise in consumption spending, and speculative investment. When the economy faces downturn, all these spending activities subside and unwinding of lenders' assets and other investors' derivative positions become very difficult. This selling pressure reinforced by overindulgence in short selling leads to a steep decline in asset prices and consequential financial crisis. Chapra (2008) observed that risk-sharing along with the availability of credit primarily for purchase of real goods and services and restrictions on the sale of debt, short sales, excessive uncertainty (*gharar*), and gambling (*qimar*), which Islamic finance stands for, could help inject greater discipline into the system and thereby substantially reduce financial instability.

In a prescient and celebrated paper, Rajan (2005) gave a graphic description of how simultaneous trading of derivatives and underlying debt securities boosted by technological advancement, deregulation, and institutional changes created a new class of investment managers who displaced traditional banks as the custodians of investors' liquid assets via disintermediation and reintermediation. Rajan (2005) explained how these managers might also create a greater (albeit still small) probability of a catastrophic meltdown. Individuals do not deposit a significant portion of their savings directly in banks any more (disintermediation). They instead invest indirectly in the market via venture capital funds, hedge funds, and other forms of private equity (reintermediation). To search for

returns in newer, more exotic areas, as excess returns in more traditional investments have been fast disappearing, these new breed of intermediaries have extreme appetite for risk and use a wide variety of strategies involving derivatives, arbitrage, short selling, and high leverage, and take position in almost any conceivable opportunity in the financial market anywhere in the world in order to maximize profit. To stay competitive and alive banks get aggressively involved in creating illiquid assets. While banks sell much of the risk associated with the "plain-vanilla" transactions they originate, such as mortgages, off their balance sheets into the balance sheets of investment managers, they then focus far more on transactions where they have a comparative advantage because of information asymmetry, typically transactions where explicit contracts are hard to specify or where the consequences need to be hedged by trading in the market. In other words, as the 'plain vanilla' transaction becomes more liquid and easier to trade, banks move on to more illiquid transactions. As plain vanilla risks are moved off bank balance sheets, banks have an incentive to originate more of them. Thus they tend to feed rather than restrain the appetite for risk (Rajan, 2005). At the same time, in pursuit of additional returns, traditional banks and investment banks join the club of new investment managers by acquiring and operating hedge funds and a number of insurance companies and pension funds follow suit by entering the credit derivatives market to sell guarantees against a company defaulting – credit default swaps (CDS). Rajan (2005) argued that all these emerging intermediaries take "risks that generate severe adverse consequences with small probability but, in return, offer generous compensation the rest of the time. These risks are known as tail risks." Long before the 2008 global financial crisis, Rajan (2005) warned that "as a result, under some conditions, the economies may be more exposed to financial-sector-induced turmoil than in the past." The AIG collapse is a classic example of tail risks exposure. AIG sold over $400 billion of CDS contracts for which it agreed to make hefty payments to contract holders if the subprime securities default. AIG was earning large profits on the premiums it collected from the CDS contracts until the tail risks became a realization in September 2008 (Mishkin, 2011).[6]

The preceding discussions and analyses clearly show that all the impediments to smooth functioning of the conventional financial market and several occurrence of global or regional financial crises over time are unintended consequences of using interest-based (*ribawi*) fixed income securities in which there is no mechanism for risk-sharing based on outcome of investment projects and the

derivatives created from these underlying securities. George Soros described these derivatives as "potential hydrogen bombs" and Warren Buffett called them "financial weapons of mass destruction and potentially lethal." None of these problems exist in the case of equity securities that are completely based on risk-sharing. Many of these problems arise in debt-financing because one or both parties to the transactions sacrifice ethical principles in favor of self-interest. For example, large investment banks have created complex derivatives such as credit default swaps and collateralized debt obligations and paid huge selling bonuses to the creators of the products. These instruments rely on the concealment of information and risk. Worse, many of these transactions are zero-sum games—one party's gain is other party's loss, and they do not create or improve social good. "The ethical principles on which Islamic finance is based may bring banks closer to their clients and to the true spirit which should mark every financial service," the Vatican's official newspaper Osservatore Romano said in an article in its March 3rd, 2009, issue (Totaro, 2009).

Unlike traditional ethical investing that employs positive as well as negative screens, Islamic stock screening uses only negative screening. Mahfooz and Ahmed (2014) argued that the lack of positive screening "contradicts the fundamental principles of Islamic finance and investment as a socio-economic and finance system that requires incorporating ethical and moral values into all economic activities." They added that "*Islam* recognizes the rights of others, such as workers, neighbors, needy people, *etc.*, and requires and encourages charitable giving as a form of community investment." El-Gamal (20006) divided activities into four categories based on net benefit or harm: (1) ones that are explicitly beneficial, (2) ones that are not obviously beneficial, (3) ones that are clearly harmful, and (4) ones that are not apparently harmful. No *shariah* prescriptions or prohibitions are needed for (1) and (3), whereas injunctions to perform (2), and prohibitions against (4), are absolutely necessary. In this regard, he cited verse 2:219 from the *Qur'an* which clearly explained that drinking and gambling belonged to (4). Humans may be enticed by the apparent benefits and thus lose sight of the greater harm. Viewed from this perspective, additional encouragement in the form of positive screening to investment in companies making positive contribution to society is not necessary. *Muslim* investors, as good citizens of the world and good Samaritans, should invest in these companies on their own as such activities belong to (1).

Unlike ethical investment, Islamic investment provides for cleansing income from investment polluted by impure income through purification and *zakat* to be discussed in the sections that follows.

III. Permissibility of Investing in Stocks

Opinions differ among contemporary Islamic jurists and *shariah* scholars regarding permissibility of investing in the stock market. *Mufti* Muhammad ibn Adam Al-Kawthari of *Darul Iftaa*, UK, eloquently summarized these divergent views as follows:

> *"Shares from the stock market are generally purchased for two reasons. Some people purchase shares for the purpose of investment, hence their main aim is to become a shareholder in a company's assets and receive the annual dividend. Others, on the contrary, purchase shares with the intention of capital gain, in that they speculate as to which shares' value will increase and then purchase them. In other words, they purchase shares when the price is low and then sell them when the price increases; hence their aim is to make profit. Some contemporary scholars have reservations with regards to dealing in shares with the intention of capital gain. Their basic argument is that purchasing and selling shares with the intention of capital gain is based on speculation, hence giving permission to transact in shares on this basis will open the door for gambling (qimar), which has been decisively prohibited in shariah. Thus, according to these scholars, it will only be permitted to trade in shares with the intention of investment and receiving the annual dividend of the company. This viewpoint is, however, a minority one.*
>
> *The majority of contemporary scholars including Shaykh Taqi Usmani, Dr. Wahbah al-Zuhayli and many others are of the view that purchasing shares is permitted regardless of whether the intention is capital gain or to receive the annual dividend, provided rules of shariah are not violated. They argue that the ruling of trading in shares is not based on the intention of the purchaser; rather, it is based on whether a share qualifies, in and of itself, to be purchased and sold. Buying and selling shares of a company is in reality buying and selling one's proportionate ownership in the company's assets, hence it is permitted to trade in shares. When it is established that shares are a justified article of trade, then, with whatever intention one purchases them, investment income or capital gain, it makes no difference. It will be permitted for one to purchase shares with the intention of capital gain, just as it is permissible to purchase them with the intention of receiving the annual dividend.*

It should be remembered that speculation is not, in and of itself, unlawful or disliked, for that is part and parcel of trade. A trader speculates as to which item's value has decreased and which item's value seems to have increased. He purchases items and commodities when their prices fall and sells them when the prices go up. Thus, this kind of speculation and guess is not unlawful in shariah. What is unlawful is that by speculating one violates a particular injunction and ruling of shariah, such as selling something that is not in one's ownership, selling something that is not in one's physical or constructive possession or getting involved in gambling and such other unlawful matters. Therefore, it will not be permitted to sell shares before they come into one's ownership or possession. Many times, shares are sold in the stock market without them having come into one's ownership, neither are they delivered. The idea of the various trading parties is also not to own the shares, rather they merely settle the difference in the end. At times, transactions as many as hundreds take place on a single share in one day. All of this is, without doubt, unlawful and a form of gambling. Thus, it will not be permitted to transact in shares where one sells them before actually acquiring ownership and possession. Conventional short sales, future sales, and forward sales are not permitted for this very reason. It will only be permitted to trade in shares if the transaction is at spot and one owns the shares. As far as selling shares before the delivery of the share-certificate is concerned, Shaykh Taqi Usmani is of the opinion that this may be permitted, as the ownership in the company's assets is established by mere transaction and not the delivery of the certificate. Ownership in the share is legally transferred from the seller to the buyer with the mere transaction taking place, hence it would be permitted to sell the shares before their delivery, although better to avoid." (Al-Kawthari, n.d.).

Al-Zuhayli (2003) characterized corporations (joint stock companies or *sharikat musahamah*) as an acceptable form of ownership in *Islam* and noted that issuing stock to multiple shareholders is permissible for such companies. Naughton and Naughton (2000) observed that the idea of dividing the ownership of capital into small pieces in the form of stocks might appear to have its origin in the early stages of the development of Western economies. However, according to Robertson (1933), this was not a Christian innovation at all; it was rather a secular scientific development borrowed by the Western European economies from medieval *Muslim* Arab and Syrian traders. Al-Qardawi (1999) echoed the opinion of the majority of scholars and pointed out that the issuance, holding, and circulation of stock is

permissible in *shariah* except when the very activity of the issuing company is prohibited in *Islam*. The International Islamic *Fiqh* Academy of the Organization of Islamic Countries (OIC) issued a ruling in 1992 that approved trading common stocks of companies that do not engage in activities which would violate *shariah* principles (Mahfooz and Ahmed, 2014). According to the *Shariah* Standard No. 21 of the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), "it is permitted to buy and sell shares of corporations, on a spot or deferred basis in which delay is permitted, if the activity of the corporation is permissible irrespective of its being an investment (that is, the acquisition of the share with the aim of profiting from it) or dealing in it (that is, with the intention of benefiting from the difference in prices)." It is, therefore, permissible to invest in stocks of publicly traded companies as long as the requirements of *shariah* are fulfilled.[7] The next section of the paper discusses these requirements.

It is permissible for *Muslim* investors to own shares of *shariah*-compliant foreign companies either by investing in home market of those companies or by purchasing American Depository Receipts (ADRs) or Global Depository Receipts (GDRs). An ADR is a certificate of ownership issued by a U.S. bank that represents indirect ownership of a certain number of shares of a specific foreign company on deposit in a U.S. bank in the company's home country. For example, when U.S. investors locally invest in companies such as Nokia, Sony, Samsung, Daimler-Mercedes, Prada, Louis Vuitton, Rolls Royce, they are actually buying ADRs of the respective companies. A U.S. bank simply purchases a bulk lot of shares from the company, bundles the shares into groups, and lists them on one of the U.S. stock exchanges. ADRs make it convenient for U.S. investors to trade shares of foreign companies in US dollars without going through currency conversion. ADRs are bought and sold on the U.S. markets just like U.S. stocks and dividends and all payments are in U.S. dollars. GDRs are the global equivalent of the ADRs. ADR/GDR investors are shareholders in the foreign companies and the sponsoring bank simply acts as an intermediary. This channel of buying foreign stocks is not much different from buying stocks through mutual funds where the fund is an agent for the shareholders.

There is another form in which indirect interest or stake in a foreign company is traded outside its domestic market. When a country's law forbids foreign ownership of companies holding strategic assets in the country, a structure known as "variable interest entity" or VIE is used to get around this restriction. A VIE is a shell company formed and registered in an offshore tax haven like Luxemburg or Cayman

Islands; the shell company is under contract to receive the profits from the original company's assets but will not actually own the assets.[8] The VIE structure has been recently used by Chinese e-commerce companies such as Alibaba and Baidu to raise capital in the U.S. market. There are more than 200 Chinese VIEs listed on major U.S. exchanges. This form of security is several steps removed from its underlying asset—the stock of the foreign company and does not represent an equity interest in that company even though VIEs are listed as ADRs or GDRs. The investors buying ADRs in the shell company are not shareholders of the original company. Rather, VIEs give investors contractual claims to a company's profits but do not grant them ownership of the company. "These are technically not shares at all but rather legal contracts registered in the Cayman Islands that purport to provide Americans with a stake in Alibaba's profits," as Fingleton (2014) commented on the legal status of so-called "Alibaba shares" issued in the New York Stock Exchange. Just as an aside, it is interesting to note that this structure was not acceptable to the Hong Kong Stock Exchange, so Alibaba decided to list in New York instead.

According to AAOIFI *Shariah* Standard No. 21, "the share certificate or what stands in its place, is a document that is deemed evidence of ownership of the shareholder for his undivided share in the assets of the company." The Council of the International Islamic *Fiqh* Academy of the OIC, which held its seventh session in Jeddah, Saudi Arabia, during May 9-14, 1992, ruled that the object of sale when a common stock is traded is an unspecified share in the assets of the issuing company (Islamic Development Bank, 2000). This ruling implies that the stock certificate is a documentation of the legal right to partial ownership of the company and its assets as a silent partner (El-Gamal, 2006). This type of partnership is permissible in *Islam* as a partnership built upon mutual consent of the shareholders. The board of directors of such a partnership is considered a legal agent of the shareholders (Al-Zuhayli, 2003). VIEs fall short of giving the investors partial ownership of the company's assets as silent partners because the law of the land prohibits foreigners from owning the company's stocks. For example, the Chinese government will not permit a foreign investor to become a shareholder (as well as a part owner) of Alibaba or Baidu with all the rights and privileges attached to it.[9] Unlike the case of common stocks, when investors buy ADRs in a VIE, they are not buying a piece of the original company, but rather buying a stake in the shell company whose assets consists of a contract to claim the original company's future

profits. There is apparently no partnership between the underlying original company and the investors buying the ADRs in the VIE. The ADRs/GDRs representing VIE in foreign companies, therefore, are not *shariah*-compliant even when the underlying companies pass line of business and financial ratio screening tests. In an email to the author of this paper on October 2nd, 2014, contemporary *shariah* scholar and Islamic economist Professor Monzer Kahf wrote: "It seems that establishing such a company (*i.e.,* a VIE) for this purpose only is not permissible and selling and buying its shares is not permissible, too."

The preceding discussion relates to post-IPO trading in shares of VIEs. A question naturally arises as to the permissibility of participating in the IPO or initial public offering in general. This issue was addressed in a white paper published by Azzad Funds, a leading Islamic mutual fund family in the U.S. The white paper (Azzad Asset Management, n.d.) noted that the AAOIFI thresholds for trading stocks in the secondary markets (in which investors subsequently buy and sell stocks of companies that have already been issued and outstanding)—debt ratio below 30 percent, accounts receivables ratio below 45 percent, and interest income below 5 percent—do not apply to the primary markets (in which stocks of companies are issued and traded for the first time), the marketplace for the IPOs. These thresholds are reduced to zero for primary market transactions. In defense of this assertion, the white paper cited a legal axiom from the scholars of *fiqh* (Islamic jurisprudence) that states: "Matters that are prohibited may be allowed to continue, provided that they were done before the fact. However, the same rule is not allowed for its initiation." The white paper further stated that the axiom has many implications for Islamic contract law, and it also applies to Islamic investing and financial contracts. Based on this legal axiom, AAOIFI Standard No. 21 distinguishes between trading in the primary market (IPO) and subsequent trading in the secondary market. In the secondary market there are rules for *shariah* screening by which one is able to invest in and benefit from these assets. It was noted that the issuance/purchase of shares in the IPO of companies that have impermissible activities, no matter how little, are deemed by AAOIFI Standard No. 21 to be unacceptable in the primary market. This is because the transaction is at its point of initiation, as per the aforementioned axiom. There are some elements of impermissibility in almost every IPO arrangement that would make it unacceptable. IPOs are quite often leveraged and involve interest-based transactions. Essentially, a company uses the IPO to rearrange its capital and asset structure and

usually, to swap debt for equity. For example, in filing Form S-1 with the SEC, both Google and Facebook stated that the net proceeds from the IPO would be used for general corporate purposes including financing working capital. This indicates that pre-IPO general corporate activities, including working capital, are financed with debt or a bank loan. Funds may come from a loan, venture capital firms, or bridge financing offered by investment bankers. A part of the net proceeds from the IPO is generally used to pay off these obligations. Consequently, there is zero tolerance for violating *shariah* restrictions in the primary market and participation in the IPO, therefore, becomes a prohibited transaction.

Before a company goes public, the company is not required to provide complete information about the pre-IPO debt level and related transactions and therefore, the company's audited financial statements are not public and available to investors. This incomplete information makes it impossible to apply financial ratios screening methodology to these companies. This information asymmetry (*i.e.,* investors not knowing what the issuing company knows) may lead up to *gharar* or excessive uncertainty while investing in the IPO and should be avoided. Once the company goes through the IPO, its debt and other financial ratios become public and available for screening. Furthermore, prior empirical research studies of the performance of IPOs (Ritter, 1991, Loughran and Ritter, 1995) found substantial underperformance of the IPOs relative to listed stocks with similar characteristics and concluded that investing in IPOs is hazardous to your wealth. IPOs face a great deal of uncertainty because of no performance record or a short record and therefore, are more risky than similar listed stocks. It is strongly recommended not to invest in IPOs.[10]

IV. *Shariah* Stock Screening

Stock screening is the process of selecting a subset of stocks from the feasible investment opportunity set comprising all the available stocks to accomplish certain investment objectives. In an Islamic or *shariah* stock screening process, the universe of all possible stocks is purged of stocks that are not compatible with Islamic investment principles so that Islamic investors can adhere to *shariah* guidelines and principles while investing. Therefore, stock screening can be used as a tool of separating *shariah*-compliant stocks from *shariah*-noncompliant stocks. *Shariah* stock screening is a two-step process that involves a qualitative screening of line or nature of business followed by quantitative screening based on a set of financial ratios. These tests examine the business activities as well as the

financial structure of a company to ensure that the business does not profit from interest (*riba*), excessive uncertainty (*gharar*), and gambling (*maysir*), and that the business activities are permissible from the *shariah* point of view to be considered for investment by *Muslim* investors (Mahfooz and Ahmed, 2014). A stock has to pass both of these tests to be *shariah*-compliant and eligible to be in an Islamic investor's portfolio. Line or nature of business screening considers whether business operations of the company issuing the stock are compliant with *shariah*—companies whose core business is in a sector that is considered impermissible in *shariah* are excluded from the set of permissible investments.

Financial ratios screening looks at the relative size of the company's interest income and return from interest-based assets and the company's overall debt ratio. If too large a percentage of its income comes from interest, a company may be excluded even if its core business is permissible. For example, an apparel company invests seasonally surplus cash in interest-bearing money market securities such as Treasury bills and low risk commercial papers. If interest income represents a large part of its total income, this company may not be eligible for investment by Islamic investors. If assets are financed with excessive debt, a company is screened out even if it is in a permissible line of business. Real estate developers that use heavy debt-financing are therefore excluded, even though real estate development itself is *shariah*-compliant. If the debt on a company's balance sheet is structured in a *shariah*-compliant manner (*i.e.,* is not interest-based), the debt ratio screening is not applied. This is because the motivation behind the rule is to screen out companies that largely benefit from the use of interest. Investing in leveraged Islamic banks and *shariah*-compliant real estate companies is deemed permissible without consideration of their debt ratios (Rehman, 2010).

A number of different *shariah* stock screening methods are employed by major global indexes, the Accounting and Auditing Organization for the Islamic Financial Institutions (AAOIFI), and a handful of third-party screening providers. The Dow Jones Islamic Market (DJIM) World Index is the first stock market index comprising the global *shariah*-compliant stocks. Launched in 1999, the DJIM family of indexes provides regional, industry sector, and market cap indexes, as well as specialized indexes and custom measures—including indexes for 69 countries. An independent *shariah* board consisting of five eminent *shariah* scholars from around the world advises Dow Jones Indexes on the methodology for screening stocks for inclusion in the DJIM Indexes (S&P Dow Jones Indices, 2012). According to DJIMI

Shariah Supervisory Board, the following businesses/industries are excluded from the set of permissible investments: (1) alcohol, (2) pork-related products, (3) conventional financial services (*e.g.*, banking, insurance, *etc.*), (4) entertainment (hotels, casinos/gambling, cinema, pornography, music, *etc.*), (5) tobacco, and (6) weapons and defense industries. Permissible companies must not derive more than 5 percent of total revenue from the above-described impermissible businesses/industries to remain *shariah*-compliant. For financial ratios screening, all of the following should be less than 33 percent in order to be *shariah*-compliant: (1) total debt divided by a trailing 24-month average market cap, (2) the sum of a company's cash and interest-bearing securities divided by a trailing 24-month average market cap, and (3) accounts receivables divided by a trailing 24-month average market cap.

S&P *Shariah* indexes were introduced in 2006. The following businesses and industries are excluded from the set of permissible investments: (1) advertising and media with the following exceptions: media and advertising companies generating revenues in excess of 65 percent of total income from the GCC countries, news channels, newspapers, and sports channels, (2) alcohol, (3) cloning, (4) financials except: Islamic banks, Islamic financial institutions, and Islamic insurance companies defined as a company having a *shariah* committee to supervise all activities, all products are Islamic, all investments of the company are Islamic, and passes accounting based screens, (5) gambling, (6) pork, (7) pornography, (8) tobacco, and (9) trading of gold and silver as cash on deferred basis (Standard and Poor's, 2014). After removing companies with noncompliant business activities, the remaining companies are examined for compliance with certain financial ratios. Three areas of focus are leverage, cash, and the share of revenues derived from noncompliant activities. In order to be *shariah*-compliant, the following requirements must be met: (1) total debt divided by a trailing 36-month average market cap must not exceed 33 percent, (2) the sum of a company's cash and interest-bearing securities divided by a trailing 36-month average market cap must not exceed 33 percent, and (3) accounts receivables divided by a trailing 36-month average market cap must not exceed 49 percent. Such accounting-based screens are not applicable to companies that are run on a fully *shariah*-compliant basis. In S&P *Shariah* indexes, revenues from impermissible sources can be tolerated if they comply with the following threshold: impermissible income other than interest income divided by total revenue does not exceed 5 percent.

The Russell-IdealRatings Islamic Index is based on the Russell Global Index. Specific financials-based and sector filters are applied to the Russell Global Index to create the Russell-IdealRatings Islamic Index. The Russell-IdealRatings Islamic Index contains around 3,100 securities in 48 countries. The Index is modular, divisible into components by market value, country, region, sector, industry, and style (Russell Investments, 2014). The Index does not include a company if (1) the sum of interest earned and revenue from prohibited activities divided by total revenue or sales exceeds 5 percent. The prohibited activities are: (1) financial institutions such as traditional banks and insurance companies that deal with interest or financial instruments that violate *shariah* rules, (2) production and distribution of alcohol, (3) production and distribution of tobacco, (4) production and distribution of pork and its derivatives, (5) management of casinos and gambling halls and production of games such as slot machines, (6) houses of prostitution or vice, (7) adult entertainment such as pornographic films and services, (8) production and distribution of magazines, advertising, music, satellite channels, and cinemas that violate *shariah* rules, including violent or adult games, (9) trading of gold and silver as cash on deferred basis, (10) manufacturing of weapons, and (11) stem cell, human embryo, and genetic cloning (research firms, therapy clinics, *etc.*). The index also excludes companies that pass the *shariah*-compliant activity/sector test if (1) the sum of cash, deposits and receivables divided by a trailing 12-month average total market cap exceeds 70 percent, (2) interest-bearing debt divided by a trailing 12-month average total market cap exceeds 33 percent, and (3) the sum of cash, deposits, and interest-bearing securities divided by a trailing 12-month average total market cap exceeds 33 percent.

El-Gamal (2006) argued that the use of a market cap in the denominator of debt and receivables ratios is likely to enlarge (reduce) the permissible universe when market prices rise (fall) by lowering (increasing) the resultant ratios. This has the effect of adding some stocks to the permissible feasible set when their prices are high (*i.e.,* over-priced relative to their long-term average) and dropping some stocks when their prices are low (*i.e.,* under-priced relative to long-term average). In other words, to remain *shariah*-compliant, *a* market cap divisor forces investors to purchase some incoming stocks at high prices and sale certain other outgoing stocks at low prices, which appears to be counterintuitive to the rational investment strategy of "buy low and sell high." El-Gamal (2006) suggested either adjusting the permissible debt and receivables ratio up or down when the market conditions change (*i.e.,* a lower ratio

cutoff when prices are higher and a higher ratio cutoff when prices are low), or automatically adjusting for secular market trends by screening out the companies that are, say in the top 20 percent for those ratios. However, suggestion of El-Gamal (2006) would make the ratio cutoff a moving target and from a practical standpoint it would be difficult to implement. This uncertainty would cause hardship to investors similar to the case pointed out by *Imam* Abu Hanifa with respect to *zakat* calculation involving additional investment during a year (Al-Qardawi, 1999). However, the use of a 36-month or longer-term moving average of a market cap would smooth out the ratio cutoff and dampen the effect resulting from short-term price volatility. Moreover, companies with fairly stable stock prices would be less affected by this issue.

The Morgan Stanley Capital International (MSCI) Islamic Index Series is based on an MSCI Equity Index (or any combination of MSCI Equity Indexes). The index series screens out companies which are directly active in, or derive more than 5 percent of their revenue (cumulatively) from the following activities: (1) alcohol: distillers, vintners and producers of alcoholic beverages, including producers of beer and malt liquors, owners and operators of bars and pubs, (2) tobacco: cigarettes and other tobacco products manufacturers and retailers, (3) pork related products: companies involved in the manufacture and retail of pork products, (4) conventional financial services: commercial banks involved in retail banking, corporate lending, investment banking; companies involved in mortgage and mortgage related services; providers of financial services, including insurance, capital markets, and specialized finance; credit agencies; stock exchanges; specialty boutiques; consumer finance services, including personal credit, credit cards, lease financing, travel-related money services and pawn shops; financial institutions primarily engaged in investment management, related custody and securities fee-based services; companies operating mutual funds, closed-end funds and unit investment trusts; financial institutions primarily engaged in investment banking and brokerage services, including equity and debt underwriting, mergers and acquisitions; securities lending and advisory services institutions; and insurance and reinsurance brokerage firms, including companies providing property, casualty, life disability, indemnity, or supplemental health insurance, (5) defense/weapons: manufacturers of military aerospace and defense equipment, parts or products, including defense electronics and space equipment, (6) gambling/casino: owners and operators of casinos and gaming facilities, including companies providing lottery and betting services, (7) music: producers and distributors of music, owners

and operators of radio broadcasting systems, (8) hotels: owners and operators of hotels, (9) cinema: companies engaged in the production, distribution and screening of movies and television shows, owners and operators of television broadcasting systems and providers of cable or satellite television services, and (10) adult entertainment: owners and operators of adult entertainment products and activities (MSCI Research, 2014). MSCI uses the following three financial ratios to screen companies in permissible businesses: (1) total debt over total assets, (2) sum of a company's cash and interest-bearing securities over total assets, and (3) sum of a company's accounts receivables and cash over total assets. Companies with any of the financial ratios exceeding 33.333 percent are screened out.

The FTSE *Shariah* Global Equity Index Series is based on the large and mid cap stocks in the FTSE Global Equity Index Series universe. Initially, companies involved in any of the following activities would be filtered out as *shariah*-noncompliant: (1) conventional finance (non-Islamic banking, finance and insurance, *etc.*), (2) alcohol, (3) pork related products and non-*halal* food production, packaging and processing or any other activity related to pork and non-*halal* food, (4) entertainment (casinos, gambling and pornography), (5) tobacco, and (6) weapons, arms, and defense manufacturing. The remaining companies are then further screened on a financial basis. The following requirements must be met for companies in permissible businesses to be considered *shariah*-compliant: (1) debt is less than 33.333 percent of total assets, (2) cash and interest-bearing items are less than 33.333 percent of total assets, (3) accounts receivables and cash are less than 50 percent of total assets, and (4) total interest and noncompliant activities income does not exceed 5 percent of total revenue.

FTSE Group (2014) stated that unlike other competitor methodologies, a more conservative approach to *shariah* compliance is ensured by rating debt ratio limits that are measured as a percentage of total assets, rather than more volatile measures that use a trailing 12-month average market cap. This ensures companies do not pass the screening criteria due to market volatility, allowing the methodology to be less speculative and more in keeping with *shariah* principles. Critics of the total assets divisor argue that unlike market cap which reflects the true economic value of a company, total assets represent only the historical value and tend to underestimate a company's fair market value. Furthermore, the total assets reported in the financial statements are affected by the generally accepted accounting principles (GAAP) used by a company (Mahfooz and Ahmed, 2014). It is possible that a company may be

misclassified based on total assets divisor in the screening process because of specific GAAP used for inventory valuation, revenue recognition, or depreciation charges. In the financial market, everything is based on market value that is a reflection of the consensus among market players regarding valuation. Book value (the basis for total assets divisor), as mostly used in the accounting area, is historical or backward-looking and hardly reflective of current market conditions, while market value is forward-looking. The observed market value is subject to microscopic scrutiny by market participants and reflects the market's perception of value changes based on flow of information. Book value is simply an artifact of accounting policies and is less relevant to the market.

Now, I will quote a seemingly unrelated but very relevant Prophetic tradition (*hadith*) to reflect upon the importance of market value. When a companion of the Prophet (peace be upon him) came to him with some higher quality dates, the companion was asked about their source. The companion explained that he exchanged one unit of higher quality dates for two units of lower quality dates. The Prophet (peace be upon him) told him not to do that as it is exactly like the prohibited *riba* (interest) and instructed him to sell the first type of dates and then use the proceeds to buy the other. The Prophet's command to trade any item in the market for cash and not to exchange goods of different quality at a mutually agreeable ratio reflects the importance of a market determined price that is based on demand and supply in the marketplace and the interaction of buyers and sellers.[11]

The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) is an Islamic international self-regulatory body that prepares accounting, auditing, governance, ethics, and *shariah* standards for Islamic financial institutions and the industry. As an independent international organization, AAOIFI is supported by institutional members (200 members from 40 countries) including central banks, Islamic financial institutions, and other participants from the international Islamic banking and finance industry worldwide. Its *shariah* board is responsible for standardizing Islamic banking practices throughout the world. AAOIFI has successfully defined accounting and *shariah* standards that are adopted or recognized by several countries. According to AAOIFI *Shariah* Standard No. 21, a company in a permissible business or industry must pass the following financial ratios screening in order to be *shariah*-compliant: (1) sum total of long- and short-term interest-bearing debt must not exceed 30 percent of market cap, (2) sum total of short-, intermediate-, and long-term interest-earning deposits must not

exceed 30 percent of the market cap, and (3) the amount of income generated from impermissible activities must not exceed 5 percent of the total income of the company, irrespective of the income being generated by undertaking an impermissible activity, by ownership of impermissible assets or in some other way (AAOIFI, 2010). AAOIFI does not apply its screening tool to any set of stocks. Its standards generally serve as guidelines for Islamic mutual funds and other institutional investors that want to set up an in-house *shariah* screening shop.

Apparently, less divergence exists among alternative *shariah* screening methods under line of business screening, *i.e.,* identifying prohibited activities/industries. This is because these prohibitions are derived from primary sources of *shariah* tenets—the divine revelation or the *Qur'an* and the *Sunnah* (*i.e.,* the sayings and actions of the Prophet [peace be upon him] as well as the practices that he witnessed and approved implicitly). However, there appears to be a minor disagreement between the methods regarding whether or not to consider certain industries such as the weapons, defense, and media agencies sectors as *shariah*-compliant. A closer look at the defense industry reveals some gray areas that make it difficult to draw the line. Since, as per *shariah*, defense is necessary to guarantee the safety of the citizens and the functioning of the state, some *shariah* scholars, instead of rejecting outright all defense and weapon manufacturing companies as non-compliant, have instituted certain clauses and segregated the industry based on the nature of the weapons produced, mechanisms used, the target customers, *etc.*, (Dasgupta, 2012). In addition, some screening methods are more tolerant than others. While Dow Jones and the S&P exclude companies which have any involvement in impermissible activities, the FTSE and MSCI tolerate minor violations, as long as the core business is permissible (Mahfooz and Ahmed, 2014). On the other hand, there are significant differences among alternative *shariah* screening methods in financial-based filters. This is because these rules are based on the secondary sources of *shariah* tenets—*Ijtihad* or the mental effort of scholars having juristic expertise to find solutions to emerging problems and issues, and *qiyas* or finding solutions for a new situation through analogy in the light of the text of the *Qur'an* and the *sunnah* (Ayub, 2007).[12] Use of the secondary sources of *shariah* allows a greater degree of freedom to *shariah* boards of screening providers to set standards based on their degree of tolerance for impermissible operations.

It is worth noting that the financial ratios screening allows a reasonable level of interest-bearing securities and associated interest income and expenses. It is argued that excluding all companies that deal in *riba* (viewed generally as any payment or collection of interest) would leave Islamic investors (individuals as well as institutions) with a very small universe of permissible equity instruments, leading to massive inefficiency in portfolio construction and management relative to the overall universe of such instruments available to conventional investors (El-Gamal, 2006). This is particularly true in Western economies with a conventional financial system in which debt financing is ubiquitous and very attractive as a source of cheaper capital (relative to equity financing) because of tax-deductibility of interest expenses. The prohibition of any trading in the stocks of companies that make any impermissible transaction whatsoever would make it very difficult and inconvenient for many individual *Muslim* investors to invest their savings and would cause hardship on them, especially in the West and in other non-*Muslim* countries, because there are only a few stocks that comply with this total restriction. Since hardship always calls for relaxation of the rule of prohibition, the solution suggested by a group of Islamic jurists and *shariah* scholars (led by *Mufti* Muhammad Taqi Usmani of Pakistan and *Sheikh* Dr. Abdul Sattar Abu Ghuddah of Syria—both members of the International Islamic *Fiqh* Academy of the OIC) was to include stocks of companies with moderate amount of debt, interest income, and interest expenses in the financial statements and/or minor involvement in impermissible operations out of necessity (*darura*) to relieve the hardship of *Muslim* investors by expanding the feasible set of permissible stocks (Kahf, n.d.).

However, there is lack of consensus among the methods on the level of the ratio cutoffs employed for financial screening. The commonly used ranges of thresholds are 30-33 percent for debt level and interest-based investment/deposit and 33-49 percent for liquidity (Mahfooz and Ahmed, 2014). The one-third rule (30-33 percent) used by *shariah* indexes in financial ratios screening was drawn from a juristic principle that “one-third is significant,” based on a Prophetic tradition (*hadith*) limiting donation in a will to one-third of the estate (El-Gamal, 2006). This one-third rule was criticized as having a relatively unrelated origin in inheritance law (El-Gamal, 2006), and it was also pointed out that the *hadith* was used out of context (Mahfooz and Ahmed, 2014). The ratio cutoff for liquidity that varies between 33 and 49 percent is derived from the juristic principle that the “majority deserves to be treated as the whole of a thing” (Usmani, 2002). This implies that if a security represents composite assets, the rule of the

dominating asset (having more than 50 percent) will apply to the whole security (Mahfooz and Ahmed, 2014). On the basis of this rule, a company with accounts receivables (or cash and accounts receivables together) not exceeding 50 percent of market cap (or total assets) is considered having a tolerable level of impermissible activities. It appears that the 5 percent cutoff for income from impermissible operations is derived from the *ijtihad* of contemporary *shariah* scholars rather than being explicitly linked to the *Qur'an* and the *sunnah* (Derigs and Marzban, 2008, Mahfooz and Ahmed, 2014).

Although *shariah* screening criteria are commonly used and generally accepted in practice, there appears to be no uniform *shariah* investment code of conduct or a universal predetermined fixed set of *shariah* screening criteria (Mahfooz and Ahmed, 2014). It is interesting to note that the International Islamic *Fiqh* Academy of the OIC has not yet passed a resolution adopting or endorsing a financial ratios screening methodology. However, several members of the International Islamic *Fiqh* Academy, in their individual capacity as member of the *shariah* boards of leading *shariah* indexes and the AAOIFI, have approved the financial ratios screening. As Islamic finance matures, it is incumbent upon credible universal *shariah* bodies like the International Islamic *Fiqh* Academy to adopt on an urgent basis a resolution standardizing business activities and financial structure screening to stop proliferation of non-standard and divergent screening methods by screening providers that cause substantial confusion among individual as well as institutional *Muslim* investors.

All of the major global stock market indexes comprise a limited universe of stocks and there are many stocks that are not included in these indexes. One major weakness of the *shariah* screening methodology of global indexes is that only the component stocks in the applicable index are screened and a subset of the component stocks survives the screening process. This subset is a relatively small fraction of the universe of all possible stocks in the feasible investment opportunity set. However, this omission results in leaving out a large number of *shariah*-compliant stocks that are outside the index and the investor encounters "lost opportunity." This smaller asset universe to be considered in the portfolio formation process may negatively affect investor's efficient frontier and risk-reduction via diversification. Solnik (1974) demonstrates that it is possible to improve the efficient frontier and further reduce systematic risk by adding stocks from overseas markets to the portfolio because stocks in a larger sample are likely to be uncorrelated, less positively correlated, or somewhat negatively correlated.

A number of third-party *shariah* screening providers have taken the responsibility of expanding the permissible investment opportunity set of *shariah* indexes to give Islamic investors a better choice while picking stocks and more efficient portfolio formation and management. Sengupta (2012) compares and contrasts four leading third-party screening providers in terms of their key attributes. These providers are: IdealRatings (screens 42,000 plus stocks in 106 countries), Amiri S^3 (screens 40,000 stocks), Amanie Advisors (screens 33,000 stocks in 70 countries), and *Shariah* Capital, Inc. (screens 40,000 stocks worldwide). Initially, the data procurement team collects stock data from global market data providers (such as Bloomberg, Thomson Reuters, IDC, *etc.*) and other secondary sources (company financial statements, regulatory fillings, EDGAR, *etc.*) and these datasets are updated and revised more frequently than once a quarter. These third-party screening providers closely monitor the companies at the borderline of becoming noncompliant via more frequent communication with the companies in question. Their proprietary algorithms search all public information and news about a given company to determine whether specific company revenue should be screened further for noncompliance while a team of researchers scrutinizes algorithm outputs for accuracy checks and analyzes company financial data and lines of business. A large number of revenue streams of interest to *shariah* compliance are tracked for each company. Each company is finally screened using appropriate financial ratios. All these steps result in much more accurate, up-to-date, and detailed analysis and screening compared to the plain vanilla periodic screening methods of global indexes (Sengupta, 2012). All of the third-party screening providers have in-house *shariah* boards comprising prominent *shariah* scholars to monitor and vet the screening process.

It is not practical for individual investors to institute an in-house *shariah* screening method to select permissible stocks for their respective portfolios. The investor doesn't have access to any of the comprehensive screening results from third-party providers because it's too expensive. Unfortunately, the global *shariah* indexes do not make public the list of component stocks. Individual investors may find inputs for ratios from published financial statements of companies or from research reports of investment research firms. However, researching this information will be very time-consuming. Inputs for qualitative line of business screening may not be readily available. Looking for such information in financial statements or other secondary sources may be a frustrating experience. So what options are available to

an investor for directly investing in a *shariah*-compliant portfolio? One option for investors is to demand that their brokerage houses subscribe to products and services of third-party screening providers and make them available to their clients. The third-party screening providers should also promote and market their products and services to retail brokerage houses for the benefit of *Muslim* investors who want to adhere to *shariah* principles while investing. Currently retail brokerage houses do not have critical mass to set up an in-house *shariah* screening shop to serve *Muslim* investors. Until *shariah* screening is available from brokerage houses, individual investors must try their best to make sense out of the screening methods of global *shariah* indexes and AAOIFI to pick *shariah*-compliant stocks while directly investing in the stock market or depend on Islamic mutual funds for investing indirectly.

It is worthwhile to revisit the issue of wider divergence among screening providers regarding quantitative *shariah* stock screening and to discuss the issue in the light of juristic difference (*al-khilaf al-fiqhi*) in Islamic jurisprudence (*fiqh*). Divergence of opinion present in *shariah* stock screening is not something uncommon in *Islam*. *Islam* does not prohibit, but rather encourages, juristic differences. The four leading *Sunni* schools (*madhhab*) of Islamic jurisprudence, *Hanafi*, *Maliki*, *Shafi'i*, *and Hanbali*, are identical in approximately 75 percent of their legal conclusions, while the remaining questions, variances, within a single family of explainers of the *Qur'an* and the Prophetic *sunnah*, are traceable to methodological differences in interpretation or authentication of the same source of information—primary textual evidence, differing viewpoints occasionally existing in even a single school (Keller, 1994). Sabiq (1991) cited the following incident from a Prophetic tradition (*hadith*) to show how one could have two different opinions on one issue and still be right: When the Prophet (peace be upon him) sent out an expedition, he instructed the group to offer mid-afternoon prayer (*salat al-Asr*) after reaching the destination. While still on their way to the destination, the time for the prayer came and some members of the group prayed during their ride to their destination, while others did it after reaching the destination. The first group thought the Prophet's intention was to make them reach the place in the shortest possible time; the second group thought that they were expressly told not to pray on the way to the place. When the issue was brought to the Prophet's attention, he ruled that both of them were right in their execution of his commandment. The reason was that the first group reflected on the intention of the Prophet's

commandment, while the second group took it literally. This kind of divergence of position is always possible and cannot be avoided.

Acceptable juristic differences may occur due to the variant opinions among qualified jurists in matters lacking specific rulings by decisive *shariah* texts, thus making them eligible to express differing legal opinions (Hammad, 1992). There are plenty of examples illustrating this, such as the many issues and challenges facing the Muslims in the current global environment in the field of finance, government, society, and many other areas. The *shariah* texts leave the door open for juristic ingenuity to come up with solutions for such situations through *ijtihad*—the basis of which remains, of course, on meticulous scholarly dependence on recognized sources and principles of *shariah*. For legal differences to be valid, the conflicting opinions must come from the qualified jurists, who besides having a thorough understanding of *shariah*, possess the insights and experience necessary to consider unique conditions and circumstances of those affected (Hammad, 1992).[13]

Regarding standardizing the quantitative screening for *shariah*-compliant or *halal* investment, the prestigious *shariah* body, International Islamic *Fiqh* Academy of OIC, should provide an interval estimate of threshold for tolerance for impermissible activities (say, between x percent and y percent) as broad guidelines instead of a point estimate (of say, x percent) so that scholars of various schools (*madhhab*) of jurisprudence can exercise reasonable judgment and use a degree of freedom to institute specific screening guidelines compatible with their understanding of each respective school that is solidly grounded in the *Qur'an* and the *sunnah* and not just a practice without a proof from the *shariah*. It should be noted that diverse juristic opinions reflected in alternative quantitative *shariah* stock screening methods demonstrate the accommodating nature of *fiqh* as long as *fiqhi* opinions are not mere mind games of scholars or matters of extrapolation (*i.e.,* reading into the text something not there), but are viable and equally acceptable options, meeting the needs of present day *Muslim* investors. Diverse *fiqhi* opinions can also be a great help in learning as well as guarding against the unyielding rigidity that may hold back the growth and the contribution of Islamic finance in the contemporary world (Sabiq 1991).

The discussion of *shariah*-compliant investment will be anything but complete without bringing up the Islamic alternative to interest-bearing conventional bond – *sukuk* or Islamic asset-based securities. The word *sukuk* (plural of the Arabic work *sakk*, meaning "certificate") reflects participation rights in the

underlying assets and *sukuk* are, therefore, participation certificates against a single asset or pool of assets (Iqbal and Mirakhor, 2011). Even though the prohibition of interest practically closed the door for a pure fixed-income security in Islamic finance, a borrower can raise funds by issuing a financial instrument or obligation whose cash flows or returns are dependent on the cash flows generated by a single asset or a pool of assets and therefore, are not pre-determined or fixed *ex ante*. In other words, *shariah* accepts the validity of a financial asset that derives its return from the performance of an underlying real asset (Iqbal and Mirakhor, 2011). The cash flows of the underlying asset(s) can be in the form of profit from sale or rental or both (Shanmugam and Zahari 2009). The AAOIFI defined *sukuk* as certificates of equal value representing undivided shares in the ownership of tangible assets, usufruct and services or (in the ownership of) assets of the particular projects or any specific investment activity. *Sukuk* are not debt securities with a financial claim to cash flow. Rather, they are trust certificates with proportional or undivided interest in an asset or a pool of assets and the right to a proportionate share of cash flow is derived from ownership interest that carries risks and benefits. *Sukuk* are asset-based rather than pure asset-backed securities with ownership claim on the underlying asset or pool of assets (Godlewski *et. al.*, 2013).

The process of issuing a *sukuk* is very similar to that of conventional securitization for asset-backed securities (ABS) except that *riba*, *gharar*, and other prohibited activities are avoided. An asset or a pool of assets owned by a borrower is sold to a special purpose vehicle (SPV) set up only for this purpose as a separate legal entity in a tax-efficient territory, and the SPV pays for the asset(s) by raising capital from investors by issuing standard denomination certificate of ownership claims on the assets. The SPV then either resells or leases the assets to the borrower and receives a future lump sum or periodic lease payments. These cash flows are passed on to the investors after covering administrative expenses of the SPV. An insurance company or an investment bank guarantees the cash flows to the investors for a fee and a rating agency rates the certificate purely on the basis of the credit risk of the borrower. The guarantee and the rating together make the certificates investment quality and attractive to the investors. *Sukuk* also allow the owner to monetize a highly appreciated asset and use the proceeds to finance other business activities. *Sukuk* are attractive to conventional investors as their cash flows resemble those of a conventional bond. It is permissible for *Muslim* investors to invest in *sukuk*. *Sukuk* can be traded in the

secondary market provided the underlying pool consists of a majority (50 percent or more) of tangible assets. *Shariah* does not allow *sukuk* created from financial assets or debt to be traded in the secondary market because of the restriction on selling debt.

The *sukuk* market is one of the fastest growing segments of the global capital market and has been used by conventional and *shariah*-compliant businesses as well as sovereign borrowers to reach out and tap *shariah*-compliant investors in the Middle East, Malaysia, and elsewhere in the Islamic world. Businesses and governments in the Islamic world have been raising billions of dollars by issuing *sukuk*. In 2002 the Malaysian government raised $600 million from *sukuk* issue and thus became the first country in the world to issue a sovereign *sukuk*. In November 2009, General Electric sold $500 million in *sukuk* and became the first major U.S. company selling *sukuk*. The governments of Britain raised £200 million by issuing *sukuk* in June 2014, as part of a bid to transform London into a global capital of the Islamic finance and became the first nation outside the Islamic world to issue sovereign *sukuk*. Goldman Sachs raised $500 million by issuing *sukuk* in September 2014, becoming the first conventional U.S. bank to issue *sukuk.* The world's largest corporate *sukuk* to-date is valued at $4.8 billion that was issued by Binariang GSM Sdn Bhd of Malaysia in 2007 to facilitate the privatization of a cellular operator.

V. Purification of Investment Income

A *shariah*-compliant company may earn no more than 5 percent of its total revenue from impermissible sources. For example, an airline may generate revenue by serving alcohol or selling cigarettes on flights. This may be passed on to the investors in the form of dividend or added to retained earnings. A *Muslim* investor must not benefit from such income directly or indirectly and must give it away. Purification is the process of identifying part of the income coming from impermissible activities and donating that income. There are two methods of purification – income purification and dividend purification (Sengupta, 2012). According to AAOIFI *Shariah* Standard No. 21, earning purification is obligatory for one who owns the shares at the end of the financial period, whether or not the profit was distributed and whether the company made a profit or suffered a loss (AAOIFI, 2010). However, purification is not obligatory for an investor selling shares before the end of the financial period.

In the income purification method, regardless of profit or loss, the total amount of purification is the total income from impure (*haram*) sources multiplied times the number of shares owned as a

percentage of the number of shares outstanding. In the dividend purification method, the total amount of purification is the total income from impure sources as a percentage of the company's total revenue (called dividend purification ratio or dividend adjustment factor) multiplied times the amount of dividend received. MSCI and S&P *Shariah* Indexes and *shariah*-compliant US mutual funds, Azzad Mutual Funds use the dividend purification method and provide investors with a dividend purification ratio. DeLorenzo (2000) noted that if a company suffers a net loss and still declares and pays a dividend, the dividend purification would be meaningless. This is because impure income as a percentage of net loss will be negative and that will make the total amount of purification negative. In such a case, AAOIFI's income purification method would be more appropriate. The income purification method appears to be more sensible than the dividend purification method. Dividend purification cleans only that part of income which is distributed as dividend. Unlike in the income purification method, the impure income portion will not be purified in the dividend purification method if the company does not pay dividend or suffers a loss, but still generates some impure revenue. However, asking the investors to purify the prohibited income portion from their own pockets if the company does not pay dividend or suffered a loss, does not seem practical (Mahfooz and Ahmed, 2014).

The contemporary *shariah* scholars disagree on purifying the profits that are made through capital gains realized by investors from selling stocks. Some scholars are of the view that purification of capital gains is necessary, because the market price of the stock may reflect an element of impure income embedded in the earnings or assets of the company. The other view is that no purification is required if the shares are sold, even if the sale results in a capital gain. The reason is that no specific part of the stock price can be directly attributed to the impure income of the company. It is obvious that if most of the assets of the company are pure (*halal*), a very small proportion of its assets may have been generated by impure income. This small proportion is not only unknown, but also insignificant relative to the bulk of the assets of the company. Its impact on stock price and stock price appreciation (*i.e.,* capital gain) will be negligible and can be ignored (Usmani, 2002).

It is worthwhile noting that El-Gamal (2006) pointed out a number of paradoxes arising from the income-cleansing process as currently practiced. The volatility in the market interest rates may complicate the cleansing process by making it difficult to compute the portion of capital gain and dividend attributable

to interest income. When market interest rates are high, companies sitting on large piles of surplus cash (like Apple, Google, Microsoft) earn more by investing in the money market. This enhanced cash may profitably be utilized for acquisition, R&D, increased dividend, stock buyback, and so on. Investors generally value such flexibility and therefore it will drive up the stock price, resulting in capital gains. On the other hand, when interest rates are low, companies with a tolerable level of debt will be able to reduce interest expenses leading to significantly higher returns on equity and consequently higher dividends and/or capital gains. However, computing the percentage of capital gains and/or dividend due to that spillover effect is virtually impossible. El-Gamal (2006) suggested dealing with some of these concerns in the short- to medium-term by instituting some internally consistent set of rules for cleansing unlawful returns from a variety of sources and in the long-term by developing coherent, meaningful, and forward-looking cleansing rules. However, from a practical standpoint, it will be very difficult to execute such cleansing rules. A simple solution would be to deduct a conservative estimate of 5 percent (*i.e.,* the maximum allowable for a *shariah*-compliant stock) from the dividends received or net income so as to be on safe side if it is practically impossible to obtain all the detailed information required to precisely compute the amount of impure revenue.[14]

VI. *Zakat* on Stocks

Zakat, one of the five pillars of *Islam*, means purification and growth. It is an obligation on every *Muslim* possessing a minimum threshold of wealth (*nisab*) for a complete cycle of one Islamic lunar year (*hawl*) to donate to the poor and needy a certain percentage of wealth. There is consensus among Islamic jurists that *zakat* must be paid on crops, fruit, livestock, merchandise, minerals, gold, silver, and treasures (Sabiq, 1991). Monetary assets such as currency and assets that can be converted into currency are also subject to *zakat* as currency has replaced gold and silver as a medium of exchange and store of value. The Islamic institution of *zakat* blends economic system and ethical values together. Islam's commitment to make the society free of injustice, inequality, and exploitation obligates the Muslims to take care of the have-nots in society. Rice (1999) observed that "*zakat*, that is, a wealth tax comprising compulsory charitable-giving for specially designated groups in society, facilitates the care of all members of society. The rich are not the real owners of their wealth; they are only trustees. They must spend it in accordance with the terms of the trust, one of the most important of which is fulfilling the needs

of the poor. The word '*zakah*' means purification and as such, income redistribution is not only an economic necessity but also a means to spiritual salvation." This section examines whether *zakat* is due on investment in stocks.[15]

There are two major opinions regarding the zakatability of investment in stocks. The first opinion, promoted by eminent *ulama* (scholars) of the 20th century like Professors Muhammad Abu Zahrah, 'Abd al Rahman Hasan, and Abd al-Wahhab Khallaf, holds that stocks are purchased for the purpose of reselling to realize capital gain like any other business merchandise. As such, all tradable shares, irrespective of the types of companies, are considered tradable goods (*urud al tijarah*) in the hand of individual investors (Islahi and Obaidullah, 2004). *Zakat* is calculated on stocks on the basis of their current market value on the day that *zakat* is due, plus all income distributions from the year in the form of dividends, provided the total amount reaches the *zakat* threshold (*nisab*). The applicable rate is the standard personal wealth *zakat* rate of 2.5 percent if based on a lunar year or [2.5 x (365/354) =] 2.58 percent for a 365-day year. Al-Qardawi (1999) noted that this approach is more suitable to *zakat* payers because of its simplicity and ease of calculation. The *Zakat* Foundation of America also endorses this opinion on its website and recommends calculating *zakat* at the rate of 2.5 percent of the market value of assets. The International Islamic *Fiqh* Academy of the OIC also adopted a resolution consistent with this opinion in its fourth session held in Jeddah, Saudi Arabia, during February 6-11, 1988, which can be summarized as follows: "*If the shareholder has invested in shares for trading purposes, then his shares are subject to zakat as commercial goods. After the lapse of one year period, and if they are still in his possession, he shall pay zakat on their market value. He will pay 2.5 percent of their market value plus their dividends*." (Islamic Development Bank, 2000).

Shariah scholars agree on the question of whether to include dividends income in the zakatable value. However, there is some difference of opinion among scholars with regard to inclusion of funds added during the year (*i.e.,* additional investments) in zakatable value. Al-Qardawi (1999) surveyed and summarized these opinions as follows: "*The third case is if the acquired asset is the same kind as already-owned assets that have reached nisab, and have started the zakat year, but acquiring the new assets is independent of the already-owned assets. For example, someone owns forty sheep and during the year he purchases or is given as a gift another twenty. Zakat is not due on those sheep in that year*

according to Ahmad and ash-Shafi'i'. Abu Hanifa says it should be added to what he already owns and zakat is due on the total at the end of the zakat year, except in the case when this new asset is obtained merely in exchange for an older one that zakat has already been paid on. He adds that letting the acquired mal have a separate time for zakat would cause accounting and collection difficulties, all of which should be avoided in accordance with the ayat, ' . . He has not placed any constraint on you in the deen' (Qur'an 22:78). Malik agrees with Abu Hanifa in the case of pastured livestock, while in money he tends to agree with Ahmad and ash-Shafi'i' because according to him, the above mentioned difficulty does not arise."

Although Al-Qardawi (1999) tends to agree with the *Hanafi* point of view considering this "definitely simpler in application and much less complicated," *Imam* Malik's view is currently more appropriate because currently brokerage firms such as Fidelity Investments, TD Ameritrade, Charles Schwab, and Merrill Edge, all prepare for account holders very comprehensive monthly or quarterly account statements showing in greater detail dividend income and additional investment amounts during the period. One doesn't need financial and accounting expertise to determine these figures. As such, the work involved is significantly less complicated than preparing US federal tax returns. In an email to the author of this paper on August 16th, 2014, the contemporary scholar Professor Monzer Kahf recommended including additional investment during the year in the amount subject to *zakat,* consistent with the *Hanafi* view.

According to the second opinion, investments in stocks are treated like farming lands and are exempt from *zakat*. If an investor has purchased the stocks with the intention of long-term investment, it is the actual gain—and not the productive capital itself—that is zakatable (*Zakat* Foundation of America, 2007). Income from stocks is similar to "produce of plowed land" and therefore dividends and capital gains/appreciation from these stocks are subject to *zakat* at the rate of 10 percent for lunar year or [10 x (365/354) =] 10.3 percent for a 365-day year—analogous to gains from agricultural land irrigated by rain water and not by mechanical irrigation. This is based on a Prophetic tradition (*hadith*) stating that the produce of any land which is irrigated by rainfall is subject to 10 percent *zakat*, and the produce of land irrigated otherwise is subject to 5 percent *zakat* (Mirza, n.d.). The *Amana* Mutual Funds Trust, one of leading providers of *shariah*-compliant mutual funds, IRAs and 401(k)s for *Muslim* North Americans,

endorses this opinion on its website. Contemporary *shariah* scholar and Islamic economist Mahmoud Abu-Saud strongly defended this second opinion. He argued that it was more convincing to subject all risky investments to the same rules which applied to the risky investment in agriculture (Abu-Saud, 1986). He considered it more rational to treat such investments on the same footing as investments in agricultural land, especially in our present time where industrial, commercial, and agricultural activities have become so intertwined and inter-dependent that it is difficult to separate or differentiate any of them from the others. He also noted that it was more reasonable and more equitable to impose 10 percent *zakat* on the gain and leave the original amount to be reinvested to grow further and pay more *zakat* (Abu-Saud, 1988).

Although *Shaykh* Yusuf Al-Qardawi in Al-Qardawi (1999) initially favored the first opinion of treating investment in stocks as tradable assets subject to *zakat* at 2.5 percent, the *Shaykh* also endorsed the second opinion in a recent *fatwa* (Kahf, 2007). It appears that *Shaykh* Al-Qardawi believed that both opinions are sound and suggested that either method could be selected by the *zakat* administrator or payer (*Zakat* Foundation of America, 2007). Table 1 presents an example of calculating *zakat* on investment in stocks on the basis of both opinions. This example is partially drawn from Mirza (n.d.).

Table 1:
Calculation of *Zakat* on Investment in Stocks

Item	Date	Market Value
Beginning-of-Year Balance	August 1st, 2013	$190,004
Dividends	August 2013- July 2014	$1,050
New Investments	August 2013- July 2014	$93,225
Year-End Balance	July 31st, 2014	$359,509
Calculation of Adjusted Year-End Value & Gain/Appreciation		
Year-End Value	July 31st, 2014	**$359,509**
Plus Dividends	August 2013- July 2014	+$1,050
Year-End Value plus Dividends	July 31st, 2014	**$360,559**
Less New Investment	August 2013- July 2014	-$93,225
Adjusted Year-End Value	July 31st, 2014	**$267,334**
Less Beginning-of-Year Value	August 1st, 2013	-$190,004
Year's Gain/Appreciation	August 2013- July 2014	**$77,330**
Calculation of *Zakat*		
First Opinion (2.58 percent *Zakat* on Year-End Value)		
Including New Investment	$360,559 x .0258	**$9,302**
Excluding New Investment	$267,334 x .0258	**$6,897**
Second Opinion (10.3 percent *Zakat* on Year's Gain/Appreciation)		
	$77,330 x .103	**$7,965**

VII. Conclusions

Islam encourages believers to engage in beneficial trade and business, invest for long-term, and share moderate levels of risk. Divine Islamic law or *shariah* provides guidelines for *Muslim* investors to make reasonable and ethical investment choices from a uniquely Islamic perspective. According to the majority of Islamic jurists and *shariah* scholars, *Muslim* investors can put their savings in stocks of companies engaged in businesses and activities permissible in *shariah* as long as other requirements of *shariah* are fulfilled. The companies whose core business is in an impermissible sector are excluded from the set of permissible investments. Most of these impermissible businesses and activities either are clearly harmful or do more harm than good to individuals and society. Companies engaged in permissible business or activities must go through a financial ratios screening process to be considered *shariah*-compliant and find a place in *Muslim* investors' portfolio. Financial ratios screening looks at the relative size of the company's interest income and return from interest-based assets and the company's overall debt ratio. If interest income represents a large part of its total revenue, this company may not be eligible for investment by *Muslim* investors. If assets are financed with excessive debt, a company is screened out even if it is in the permissible line of business. The conditions laid down by *shariah* make *Muslim* investors' investment in the stock market a special case of ethical investment. Various *shariah* index providers and third-party screening providers use substantially similar financial ratio screening methods. If investment income from a *shariah*-compliant stock contains a nominal (but acceptable) income from impermissible sources, the investor is required to donate this impermissible income to purify the income. It appears that either the market value of an investment, including dividend income or net annual increase in market value of the investment plus dividend income is subject to *zakat* depending on the juristic opinion followed.

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Endnotes

[1] Islamic mutual funds are at a disadvantage compared to conventional mutual funds because of a reduced set of *shariah*-compliant stocks available for efficient diversification and risk-reduction. For example, it is possible to improve the efficient frontier and reduce systematic risk below the domestic

only level when the feasible investment opportunity set includes stocks from global markets (Solnik, 1974).

[2] Mutual funds are required by the Investment Company Act of 1940 to distribute 90 percent of their income (from capital gain and dividend) to shareholders before year-end to maintain the tax-exempt status of the fund and thus avoid double taxation for their shareholders.

[3] It is notable that the roots of socially responsible investing in the conventional world also seem to have stemmed from a religious connection – they have been traced back to the 1920s when the Methodist Church of Great Britain wished to invest in the UK stock market while avoiding companies involved in alcohol and gambling (Brownlow, 2009).

[4] Faith-based ethical funds include Catholic choices such as Ave Maria Mutual Funds and LKCM Aquinas funds. Ave Maria managers use a "proprietary moral screening process" to pick stocks, developed by its Catholic Advisory Board. LKCM Aquinas funds use the United States Conference of Catholic Bishops Socially Responsible Investment Guidelines when screening companies. Among Protestant funds, Thrivent Financial for Lutherans is the largest with more than 40 funds, including sector funds. Guidestone Funds, which began as the retirement plan for employees of the Southern Baptist Convention, has 23 funds, five of which have more than $1 billion in assets. The MMA Praxis funds are connected to the Mennonite Church USA and designed for church denominations with Anabaptist roots including Mennonite, Brethren and Amish church groups (Donovan, n.d.).

[5] "The Fourth Quadrants: A Map of the Limits of Statistics," by Nassim Taleb, The Edge, September 15, 2008.

[6] The immediate reaction to Rajan (2005) was negative. Former U.S. Treasury Secretary and former Harvard President Lawrence Summers ridiculed the warnings and then came the meltdown (Source: "Making Banking Boring," by Paul Krugman, The New York Times, April 10, 2009).

[7] It may be noted that permissibility of investing in stocks is restricted to common stocks. Companies may issue preferred and common stocks. Preferred stocks differ from common stocks in that the former usually carries a pre-determined rate of dividend if dividend is to be paid. This is not necessarily the case for common stock, as the company's board will decide dividend payout rate on common stock at the time dividend is declared and paid. A preferred stock is thus a security with characteristics somewhere in-between a bond and a common stock (*i.e.,* a hybrid security). The predetermined rate of dividend makes preferred stocks more like interest-bearing (*ribawi*) securities and thereby are impermissible.

[8] A shell company is a legally formed entity that has no significant assets or business operations of its own and primarily serves as a medium for facilitating business transactions of another company.

[9] In any case, these two companies are not currently *shariah*-compliant because of excessive debt in the capital structure.

[10] Professor Jay Ritter of the University of Florida compared the stock price performance of the IPOs with shares of other firms of the same size (market cap) for each of the five years after issue of the IPO for the period 1970-2013 and found that IPOs underperformed comparable firms by an average of 3.2 percent per year (source: http://bear.warrington.ufl.edu/ritter/IPOs2013-5years.pdf).

[11] El-Gamal (2000) observed that the ratio at which two items are traded or exchanged for one another must be compatible with the ratio of their market prices and this is called “marking to market”.

[12] It is worth noting that the operation of Western common-law system frequently focuses on reasoning by analogy from precedent [see, for example, Posner (1990), pp. 86-100] and this feature is not unique to Islamic finance (El-Gamal, 2006).

[13] The scholars of *usal al-fiqh* (‘the roots of *fiqh*’) laid down the rigorous conditions for qualified jurists to practice *ijtihad*. See Kamali (1991) and Murad (1995) for details.

[14] Morris and Ingram (2001) noted that many scholars strongly felt that purification of impermissible income also required *Muslim* shareholders and Islamic fund managers to be proactive and express via the corporation’s annual meeting and petition to management public disapproval of a corporation’s decision to earn income from impermissible sources. They added that institutional investors such as mutual and pension fund managers or organized group of investors who share a perspective often carry a significant weight. Several major corporations have revised their environmental and workplace policies in response to shareholder pressure, especially pressure from fund managers. It is also possible to take this one step further by joining forces with the proponents of socially responsible investment (SRI) and other shareholders advocacy groups to have companies divest their *shariah*-noncompliant businesses/activities. Companies divesting those activities will show up on the radar screen of the fastest growing segment of the global investment landscape – *Muslim* investors (individuals as well as institutions) worldwide.

[15] If a *Muslim* investor’s portfolio includes interest-bearing bonds and *shariah*-noncompliant stocks, the zakatable value of investment is determined without regard to the permissibility of holding these assets. Al-Qardawi (1999) pointed out that the prohibition of interest could not be the reason for exempting bonds from *zakat*. By the same token, investments in stocks of *shariah*-noncompliant companies are also subject to *zakat*. Al-Qardawi (1999) further noted that *Muslim* jurists unanimously agreed on subjecting prohibited jewelry to *zakat*, though they disagreed on the zakatability of lawful jewelry.