How Sharia law is affecting global interest rate determination

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ABSTRACT

A struggle has occurred where complacency once existed. No longer is the consumer confident that the U.S. Federal Reserve can orchestrate a stable economy with adjustments to the money supply and messages from the bully pulpit. Nor, are investors confident that the SEC can ensure transparency and financial responsibility of large corporations. A world-wide recession has decimated economies. In the search and struggle to find a way out of the recession and then to maintain a healthy growth rate the U.S. Federal Government has broken new ground in many areas through new regulation, oversight and government equity positions.

It is extremely difficult to look at or accept ideas that are not within our normal perceptual experience. For decades there has been a struggle between asset based economies and interest based economies. Islamic countries favor an asset based economy and the capitalistic world an interest based economy. Islamic financial institutions must participate with the other contracting party on a profit sharing basis. Interest, per se, cannot be charged or received according to Sharia law. In capitalistic countries ownership of the asset and the debt secured by that asset do not share proportionately in the gain or loss on the asset as they do under the Islamic concept.

Even money is perceived from a different perspective. In an interest based economy money is traded as an asset. In an Islamic country money is only a medium of exchange. Derivatives have proliferated in interest based economies over the past decade and subsequently the market for these derivatives dried up creating a world-wide recession. Dislocations will occur in markets and the choice is whether an asset based system can handle those disruptions better than an interest based system. This paper discusses the pros and cons of the two systems and as well as their common ground that could provide for a more stable world economy.

Keywords: Sharia, asset-based, interest-based, TARP, Islamic

INTRODUCTION

It is the intent of this paper to examine how financial markets will be influenced by the growing wealth of a huge world population who support the concept of Sharia Law (Omran, 2009, p.1) "Shari'ah refers to a code of law or divine injunctions that regulate the conduct of human beings in their individual and collective lives" (Ayub, 2007, p. 21). Investors rely on efficient markets to provide benchmarks for risk-return considerations in the evaluation of projected cash flows. The Efficient Market Hypothesis, with its three category breakdown, has been accepted in academic literature for decades as evidence of reliable risk-return spreads (Brigham and Ehrhardt, 2005, p. 304). Yet, during the past five years an increase in asymmetric market information rejecting the EMH strong form assumption has been detailed in the courts. Ken Lay and Bernie Madoff are recent examples of insider information and the courts response (U.S. News and World Reports, 2009). "Since insider information is punished, insider information must be valuable" (Cornett, 2009, p. 341). Greed, lack of transparency and non-comparative accounting standards have contributed to the extreme volatility of worldwide financial markets. Without a reliable estimate of future income flows and related financing costs, valuations are speculative rather than a rational risk-based financial decision. The asymmetry of information between investors and corporate executives has contributed to a worldwide recession. "The EMH, to be sure, has loyal defenders. "There are models, and there are those who use the models," says Myron Scholes, who in 1997 won the Nobel prize in economics for his part in creating the most widely used model in the finance industry—the Black-Scholes formula for pricing options. Mr. Scholes thinks much of the blame for the recent woe should be pinned not on economists' theories and models but on those on Wall Street and in the City who pushed them too far in practice" (The Economist, 2009).

Economic systems can be broken down broadly into asset-based or interest-based systems. Islamic finance is based on Sharia law which requires shared risk and return on an asset-based system (Greuning and Iqbal, 2007, p. 30). The rapid growth of Islamic finance investments has begun to challenge investments based on a fixed return for the use of money. "The emergence of Islamic banking in recent decades is considered as one of the 'most important trends' in the financial world, with an increase in the scope of Islamic financial activities being anticipated" (Al-Salem, 2008). Capitalistic economies, such as the United States, Britain and Germany, have an interest-based economy. The U.S., Britain and Germany are attempting to bridge the current economic morass with an easy money policy, more regulation and increased governmental oversight.

Academicians, financial managers and politicians in the U.S. have held a myopic view of finance, i.e. that an interest-based, capitalistic system is the most effective and efficient. That narrow view point has become self-defeating for the U.S. and other countries interfaced with the U.S. economy. That myopic point of view is changing rapidly as large corporations, such as General Motors, now have common stock that is held by the U.S. Federal Government (Sun-times, 2009) and the government makes huge loans to companies such as Fannie Mae, Tesla, AIG and Goldman Sachs. The market-based capitalistic system is undergoing a profound change.

If we look through basic academic economic and finance texts it would be unlikely that we would find a discussion of Sharia compliant finance products. Yet,

there are approximately one and a half billion muslims (Islamic adherents) in the world (CIA World Fact Book, 2010). We can contrast that figure with the approximately 300 million people in the U.S. and the approximately 500 million people in the European Union (CIA, 2010) who support financial markets that use the 10 year treasury as the bellwhether (benchmark). Sharia is the Islamic law that provides a guideline for how transactions should occur. Sharia is a way of life, both professionally and personally. A Sharia compliant product forbids charging interest or paying interest and considers money as a medium of exchange rather than as an asset that can be traded on financial markets. Under the Sharia assumption, money does not have a time value. "...no time value can be added to the principal of a loan or a debt after it is created or the liability of the purchaser fixed" (Ayub, 2007, p. 440). "The main difference between an Islamic or interest-free banking system and the conventional interest-based system... is the Islamic banks focus on the return on the physical investment..." rather on whether the interest payments are made on time (Mirakhor and Zaidi, 2007, p. 49).

THE VALIDITY OF TVM

Finance theory is based on the concept of the time value of money. A typical statement in popular finance texts is, "In fact, of all the techniques used in finance, none is more important than the concept of TVM" (Besley and Brigham, 2008, p. 128). Islamic finance rejects that money has a time value, rejecting the concept of money earning money. In Islamic finance, "What is prohibited is any claim to the time value of money as a predetermined quantity calculable at a predetermined rate not related to any real sector business" (Ayub, 2007, p. 440). Finance theory as we teach in U.S. business schools is categorically rejected. So, which one is correct? Is it just a matter of semantics? Which system is better in the efficient allocation of resources? Certainly the performance of interest based systems over the past 5 years has not been encouraging. The Islamic concept is equity based with a shared risk and return rather than a system creating debt with a fixed return over a specified period for the use of capital, i.e. "All transactions of Islamic banks should be based on exchange of commodities, goods, services or labour" (Ayub, 2007, p. 443). In a capitalistic system money is considered as an asset and is traded as such. Fiat money was disassociated with money based on a physical asset (gold) with the collapse of the Bretton Woods Agreement in 1971. Foreign currencies were pegged to the U.S. Dollar which was pegged to an ounce of gold for \$35 under the Bretton Woods Agreement (Arnold, 1992, pp. 786-87). Gold is a physical asset with demand and supply setting its value, not the Bretton Woods Agreement. Some nations, such as France and Russia traded dollars for gold and then sold the gold on the open market or held it in their reserve forcing the U.S. to come off of the gold standard.

Fiat money is considered a measure of value and a medium of exchange under Sharia, but it holds no intrinsic value in and of itself. Islamic governments cannot create money as a monetary tool for controlling the economy (Ayub, 2007, pp. 90-94). In the U.S. controlling the money supply is a basic tool of the U.S. Federal Reserve. Islamic countries associate the money supply directly with the goods that are being transacted. It is immoral to trade money for speculation such as occurs in capitalistic countries. By trading money as an asset in and of itself without any underlying identity with a

commodity or service Islamic governments consider it as undermining the basic interests of humanity. Value is only gained through a work ethic and not by trading money in a virtual world for its own sake. In 2009 the Federal Reserve System expanded the money supply in several ways in order to encourage greater consumer spending, business investment and banking credit functions. It is self-evident that an increase in the money supply without an associated increase in production and consumption of goods leads to inflation. The Federal Reserve continues to buy long-term treasuries, has taken over Fannie Mae and lends money to banks under very favorable terms in hopes of spurring home purchases and the concomitant increase in jobs and a return to economic growth. Such a system is completely contrary to that of Islamic countries to attempt to fool people into believing that real growth is created by a change in the money supply.

It is important to recognize this major difference between Islamic finance and that of capitalistic countries. In Islamic countries, money cannot be loaned out with an expectation of a fixed return at a specific point in time. Money in Islamic countries is for trade of a good and money loaned out at one point in time for the purchase of a good is returned without a return being earned on the money itself. In capitalistic countries we refer to this return regarding money as discounting or compounding. In Islamic countries this is considered riba or usurious (Ayub, 2007, p. 436). Money earned in that way is considered immoral and exploitative of those who cannot afford to make a "goods" transaction without such financing. Interest per se (receiving or paying) is forbidden by the Quran. Ten dollars in time 0 is \$10 in time period 20. There is no time value of money since money is not an asset but a measure of value and a medium of exchange. Islamic countries consider interest based financing as creating a wider and wider disparity between the wealth of the lender and that of the borrower (Ayub, p. 437). The major financial markets consider money and their counterparts to be assets with a time value since the value of the derivatives traded is considerably larger than the value of the underlying assets, i.e. the trading is executed for speculation rather than commerce. The disparity in wealth between individuals at the top of the income group in the U.S. and that of the bottom has widened over the past ten years which supports the perception of Islamic adherents.

RISK AND RETURN

For decades financial research has detailed/described difficulties created with agency, i.e. the relationship between the outside stockholder and the corporate decision-maker. A study by Jensen and Meckling (1976) examined this agency conflict. The decision-maker benefits to a greater degree on the upside than the stockholder and bears less of a loss on the downside. When profits are high, the decision-maker benefits from large bonuses and stock options. With low profits or a loss, the decision-maker still retains the base salary. The outside stockholder on the other hand does not have the benefit of a limited downside risk or a similar upside return as the corporate executive. Many executives have received large bonuses in the past five years even though profits have decreased. CITI in August 2009 announced they were increasing base salaries (an increase of about 50%) because of the restrictions on executive pay for financial institutions receiving TARP funds (Crutsinger and Bernard, 2009). Down-side risk is reduced for the executive, but earnings per share for the stockholder are reduced. Base

salaries are being increased at a time when profits are minimal and the economy is dragging. Many banks are returning the TARP funds to avoid the restraints on executive compensation. "...eight banks that took TARP money and last month passed government "stress tests" confirmed that they received permission to repay the bailout funds. They are: JPMorgan Chase & Co., American Express Co., Goldman Sachs Group Inc., U.S. Bancorp, Capital One Financial Corp., Bank of New York Mellon Corp., State Street Corp. and BB&T Corp" (Fox News, 2009).

In capitalistic countries the use of financial leverage is considered an integral part of a business. With a fixed payment for interest for the debt holder, the common stockholder benefits or suffers as EBIT changes. The debt holder will receive the same payment irrespective of the change in EBIT, but the common stockholder does not. There is no shared risk and return in this relationship. The ratio of debt to equity over the past 50 years has changed radically due to the influence of the Federal Reserve decisions regarding interest rate and market liquidity management. "Since the start of the U.S. recession in December 2007, household leverage has declined. It currently stands at about 130% of disposable income" (FRBSF Economic Letter, 2009). In 1960 it was about 55%. The similarity of this leverage change to Japan is striking, "After Japan's bubbles burst, private nonfinancial firms undertook a massive deleveraging, reducing their collective debt-to-GDP ratio from 125% in 1991 to 95% in 2001" (FRBSF Economic Letter, 2009). After 9-11 this change in money supply was particularly evident (Madura, 2006, p. 89).

With an IFI (Islamic Financial Institution) they securitize the real assets of their operations. This securitizing process requires the transfer of risk as well as ownership to the security holders. Whereas in the conventional banking system, the mortgages are separate from the risk and return of the real estate underlying the mortgage. The risk and return from the property are related to the owner of the property. A big change that has occurred recently with the current recession (2007-2010) is the possibility that secured debt holders will not be first in bankruptcy. The GM bondholders are now struggling with maintaining the ranking system of bankruptcy for a corporation. Under a proposal by the Obama administration the position of a debt holder is similar to the common stockholder than it has been under an interest-based system. "The government will own about 61 percent of the "new GM." The Obama administration has said it does not plan to interfere with the day-to-day running of the company, though government has been involved in the selection of the new company's 13-member board of directors and change of control transactions. The United Auto Workers union gets a 17.5 percent stake through its health care trust for retirees and has selected Stephen Girsky, a former GM adviser and Morgan Stanley analyst, to serve on the board. The Canadian government, which will control an 11.7 percent share, also will pick one member" (Sun Times, July 7, 2009). There is a definite change in the downside risk that is occurring with a debt holder on companies that are too big to fail.

SOLVING THE AGENCY DILEMMA

Clearly events in the last three years have demonstrated that a capitalistic market interest based system is not working. There is a disconnect between the stockholder and the management of the firm. Bonuses to executives are exceeding the profits going to the

stockholder. It is virtually impossible for the independent stockholder to understand the financial descriptions embedded in complex financial instruments. Even the every day credit cards that the consumer depends on or his checking account have multiple pages of financial jargon and legal terms that are not readily or easily comprehended by the consumer. Yet, these very financial instruments, traded on a worldwide basis, become the very essence of effective and efficient allocation of financial resources. That is, until there is a disruption in the system. Prior to that moment, the consumer and the financial institution accept that the financial instruments adequately describe the risk-return relationship. But then, there is the market disrupting influence of the Tulip Craze, Charles Ponzi, Michael Milken (Cornett, 2009, p. 201), Long Term Capital Management, Amaranth Hedge Fund, (Cornett, 2009, p. 338) and Enron, etc. and the system collapses. It has been that way for hundreds of years. And, not only are the ones directly involved hurt, but so are those indirectly connected to the highly leveraged failures (FRSB Economic Letter, May 15, 2009).

When major systems fail, other systems fill in the gap. Sharia is a system that might help close the current worldwide credit crunch. Unfortunately, a recent poll suggested that, only "...one in five Americans has a favorable view of Muslim countries" (CNN POLITICS, 2009). The poll also reported "...36% indicating that the country is at war with Muslim countries. Those numbers have remained stable since CNN's 2002 poll" (CNN POLITICS, 2009). The two parties to a sharia based asset exchange agree to the amount of ownership of each and the shared return of each, A real estate purchase, for instance, might occur where the potential homeowner would put up 5% of the purchase price and a sharia compliant financial institution would put up the other 95% of the purchase price and each would own that percent of the property. As payments are made by the potential homeowner his share of ownership increases until after some agreed period of time ownership and title is transferred from the financial institution to the homeowner. Part of the periodic payments consist of a purchase of ownership and part as profit to the financial institution. This type of transaction is called a diminishing musharakah. It is this determination of the profit between the two owners that indirectly implies "interest." While the profit ratio does not have to be related to the percent of capital invested, any loss must be shared with respect to each parties equity (Ayub, p. 317).

Under Islamic Banking both parties to the transaction share the risk. The Islamic Bank is a co-owner of the property whereas in conventional transfers of real property in the U.S. the bank is an intermediary and title is held by the purchaser of the property with the bank holding a lien. "The principle of profit-sharing (mudarabah) is well established in Islam. Under a profit-sharing agreement, the depositor has the option of earning a share either in the bank's general profits or in the profits from a specified investment or series of investments" (Esposito, p. 169).

As the wealth of muslim countries continues to increase at a rapid rate so does the need for a variety of financial instruments to handle the transference from the surplus group to the deficit group. Yet, all of these financial instruments must be sharia compliant. That compliance is agreed upon by Sharia scholars who have developed a reputation for correctly interpreting whether the description of the financial instruments meets with Sharia law. There is a precedent set then, just as in the U.S. and its rulings based on precedent. Of course, studies by these scholars slow down the transaction and

make it difficult to compete in world markets as well as increasing costs. The same thing is now happening in the U.S. as we enact more regulations and oversight of the financial industry. U.S. financial instruments were easily traded on world markets with low transaction costs and a shift of risk from one party to another relative to the financial instrument. For awhile, this system worked fairly efficiently, but the actual cost would come later when the credit market collapsed and many financial instruments could not be traded. The inherent cost of these losses was then passed on to the taxpayers in the U.S., Germany, and England to name just a few countries. The cost advantage of the interest based system then lost its edge over an asset based system with shared risk between the parties.

In 2008-09 U.S. Financial institutions received TARP funds and then invested these funds in treasury bonds earning commissions and increasing the profits of these financial institutions. By buying the bonds, interest rates are restrained from increasing. The rates are still high enough for banks to earn not only commissions, but a profit on the spread between the cost of TARP funds and their purchase of treasuries. "After returning \$10 billion in federal bailout money a month ago, Goldman Sachs reported a profit of \$3.4 billion, powered in part by its trading operations" (nytimes, 2009). Again, we have an agency conflict with major executives earning large bonuses and the U.S. taxpayer picking up a great deal of the cost. The question then emerges, is a Sharia asset based economy best or is a capitalistic interest based economy?

RECOMMENDATIONS AND CONCLUSIONS

This paper discusses how the two systems of Islamic compliant products and worldwide financial markets might coexist and create a more viable worldwide financial system. Such a system would overcome the destructive nature of misunderstood financial products such as the exotic derivatives that no longer had a market and led to toxic assets and a credit crunch. In the 70's and 80's interest rates rose in the United States and mortgages were assumable. If the interest rate spread stayed the same for lending and borrowing, banks would not have had a problem. But when some savings and loans had to pay more for deposits (the banks liabilities) and the bank was unable to retire a fixed rate mortgage on the asset side bearing a lower return, its equity was threatened. Homeowners benefited from the positive leverage created through housing price increases due to demand and inflation when they had financed with a low fixed rate. The leverage on these fixed rate low down payment loans created a tremendous pure profit to the homeowner, but thousands of savings and loan institutions failed due to bank regulations (Madura, 2006, p. 632). Recently (2007-2010), falling house prices and the terms of adjustable rate mortgages created havoc for many homeowners and a worldwide recession. Both parties to the financial transaction lost, but the homeowners equity was the first to go. In the sharia based system both parties to the transaction shared proportionately in the profits or loss according to the agreement regarding home ownership. With such a shared agreement Islamic financial institutions are far more likely to work with the homeowner than the conventional financial mortgage holder.

If government participation and manipulation of financial markets can create confidence then it should be a normal part of an economic system. The created confidence would restrict wide swings in the economy and minimize losses. The offset

to this government participation is a lack of flexibility and rapid adjustment to changing markets. The choice of the form of governments and its participation in markets is always with us. For the past two decades, it has been assumed that the Federal Reserve and the SEC could stabilize the economic system. Yet, confidence has now been eroded in the Federal Reserve and the SEC to stay ahead of rapidly changing financial instruments and markets. It is no longer a stretch to see why the two systems of asset based and interest based economies cannot be merged. A cultural change needs to occur in which trust comes from some segment as a natural part of the culture. If you can give over control to a governmental agency then you can also give control over to another group. It all has to do with trust and maintaining that trust.

The U.S. Federal Government is our collective consciousness just as Islam is a collective consciousness. There are fringe elements in both groups that have taken on a much greater role than their numbers and wealth control reflect. The mainstay of both systems is a large middle section that needs to find a common ground. The large financial losses that have occurred worldwide with an accompanying displacement of individuals who would prefer to work cannot be ignored. There is a great deal of common ground and values between muslim countries and capitalistic countries. Rather than stressing differences we need to examine how each system overlaps with the other. Sharia compliant financial products have many common components with capitalistic financial products. As Islamic countries grow in wealth there will a concomitant growth in other products that need to be Sharia compliant. Working to gether, the shared equity concept of Islam can help alleviate the large economic losses that rapidly devastated the western world in the last few years and destroyed confidence in a market based system. Finance is a language that is common to both and reflects common interests. Rethinking the role of money in an economic system is a great place to start. Money does not have a time value and trading debt without the underlying asset leads to an artificial sense of the risk return relationship. No longer should we focus on our differences and the resulting loss of lives, but focus on our common interests with financial products that meet the compliant requirements of each system.

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