

# Money, Capital and the Islamic Property Rights Paradigm<sup>1</sup>

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## Abstract

*The purpose of this paper is to highlight the profound transformations that occur in ribawi financial systems when an Islamic conception of property rights is adopted. The nature of financial transactions changes, financial markets undergo structural transformation, and money, capital and financial assets acquire new jurisprudential status. Banks' relationship with their clients and with the Central Bank will be different resulting in different macroeconomic policies and a more effective transmission mechanism. Further, the financial and real sectors of the economy will be integrated, and sustainable.*

## Islamic Finance, Islamic Banking, Islamic Property Right System, Money and Capital

The global Islamic financial industry has witnessed robust growth since its inception three decades ago. The Islamic banking industry grew at a compound annual rate of 38.5% between 2004 and 2011 (IFSB, 2013), when its global assets stood at US\$ 1.3 trillion (Thomson Reuters 2013). Despite the recent financial crisis in the ribawi system in 2008 – 2010, the global Islamic financial industry experienced only a moderate slowdown in its profitability soon picked up a steady growth post crisis period. Total assets of the Islamic financial industry reached US\$ 1.6 trillion at the end of 2012 with a 20.4% growth, year-on-year (IFSB, 2013). Growth is expected to continue at a rate of 15 % to 20% a year in most core markets. In addition to Islamic banking assets, developments are observed across all Islamic financial asset classes. In the Islamic capital markets, Islamic funds have continued to outpace most of the other asset classes in the global financial system.

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Sukuk issuance exhibited a compound annual growth rate of 44% between 2004 and 2011. Additionally, Islamic equity indices outperformed the irribawi equivalents post-crisis. Takaful industry has also gained considerable market share in some countries and is expected to grow significantly in the near future. Overall, Islamic financial industry has grown in size and geographic coverage, encompassing new jurisdictions and institutions (IFSB 2013).

It is believed that the development of the Islamic financial industry and its relatively robust growth has been due to the merits of Shari'ah property rules, particularly the prohibition of riba. The financial transactions and intermediation services in all financial institutions have been conducted in accordance with these rules. However, Islamic property right rules are not confined to financial transactions and exchange of products. They have a much wider scope of application. Implementation of financial rules of Shari'ah transforms the structure of financial markets in an Islamic economy. It eliminates the loan market for exchange of money and interest-based bonds and derivatives. Money, capital and financial assets acquire new jurisprudential status in the banking and financial transactions. The relationship between the players in the financial industry, i.e., banks, clients, and the central bank is no longer based on a lending-borrowing contractual basis; rather it is on value creating arrangements. Furthermore, the Central Bank's financial policies, aimed at stimulating the growth in the real sector or abating the inflation in the nominal sector, and the transmission mechanism become more manageable and effective.

The purpose of this paper is to highlight the profound transformations that result from changing the underlying property right system from arribawi system to an Islamic system. Further, it illustrates how the financial sector of an Islamic economy will not be independent from its real sector and how the two are well integrated, assuring the overall system sustainability.

The following section discusses the property characteristics of money and capital under the Islamic rules system. Reference will be made to money and monetary relationships in the early Islamic state in order to gain insight to the monetary relations between the state and the private sector. Distinction between different financial assets including money, capital and debt and the legal transformation of money into capital will be illuminated. The financial relationship of banks with their clients and with the Central Bank and the type of the policies that the latter may adopt will be described in the

last section. The paper concludes by illustrating the implication of the new Islamic property right system for the overall financial and real sectors of the economy.

## **II. Money, Capital and the Islamic Property Rights**

Any inquiry about money may start with two questions : what is money and why is it important? While the second question has been extensively discussed by all economic schools of thought and very competing views have been offered by their members, the first question has only captured the attention of few economists. Response to both questions depends on each school's understanding of the property rights systems. Kayed and Hassan (2010, 2011) details the concept of property rights and its application in the context of Saudi Arabia. Hassan, Kayed and Oseni (2013) details the various of Islamic financial concepts and their applications.

Two main approaches can be identified with regards to the role that money plays in the economy (Smithin,2000). The first approach is attributable to classical economists. It focuses on money's role as a medium of exchange , and asserts that money was invented to eliminate the inefficiencies and the transaction costs associated with barter exchange. However , once money was introduced and the barter exchange system improved, subsequent changes in the monetary variables have no effect on the economy. This approach ultimately leads to neutral money, natural rate of interest and real analysis of economic phenomena (Smithin, 2000).

The other approach is followed by Keynesians. It rejects that money has emerged from some natural economy based on barter exchange. It investigates specific social rules, mechanisms and institutions that facilitate creation of money and concludes in effect that markets, exchanges, business relations are the consequence, rather than the cause of the development of money (Smithin, 2000). This approach ultimately leads to the view that money and the rate of interest are real determinants of the level of income and employment. As will become evident later, although some of money attributes presented by each school might be admissible in Islamic property rights system, neither schools' view is compatible with it in totality.

Despite divergences in the classical and Keynesian views with respect to the role of money in the economy and also to the nature of money and cause of its creation, aribawi system is common to both. As mentioned above, the role of interest rate is quite evident in the Keynesian analysis of the financial sector, including

money and capital markets (Siddiqui 2015) but the classical real economic model also depends on real interest rate which is different from the nominal interest rate only by the inflation rate (Fisher 1930). It is, therefore, worthwhile to review briefly property right relations that each school deploys to present its views on money.

Both schools are cognizant of the private and public property right systems although the former is the most important to them. Given the vision of a real economy and barter exchange initially, the money that classical envision is a 'commodity money'. On the other hand, to Keynesians, money is a debt created by either the banking system or the Central bank (Wray 2000, Heinsohn & Stiger 2000). Some followers of this school argue that the notion of the classical school that considered money to be commodity is due to their limited concept of property which is merely possession of physical goods. It is exclusive of the title to the goods' stream of benefits and deprivations that will arise in the business operation of an economy. The title claim to the ownership and usufruct right of the physical goods can be exchanged in the market or be used as collateral to obtain a loan. In fact, Heinsohn and Steiger (2000) advocate that money is created by a credit contract when property is pledged by the borrower as a collateral and encumbered by the bank for issuing a loan. The interest rate is the price that the borrower has to pay the lender for the 'property premium' which must be given up when property is encumbered by the lender to issue a loan. The premium is an immaterial yield which exists as a result of the legal relations in place in the society. It is different from a physical yield resulting from the actual possession of resources.

Whether or not classical economists have been cognizant of the difference between property and possession, the lawyers and the judiciary system have long been aware of the attributes of the property in both the secular and Islamic schools. In the latter, Fuqhaha differentiate between the ownership (Milk) and property (Maal) concepts. There are physical objects that are owned but are not exchangeable in the market such as a grain, a match stick or a piece of barren land. There are objects, contrarily, which have market value but are not owned privately, like birds in the sky or fish in the sea. To the majority of Foqahah property (Maal) is that which is scarce, creates utility and has market exchange value. It is not confined to physical and marketable goods; rather

it encompasses their flow of benefits in both physical and financial forms. Property could be real or conventional. Money is an example of the latter which like other types of property can be exchanged in the market by Shari'ah compliant contracts (Yousefi, 2012; Ar Ragheb Isfahani, 2007; Al Hanafi; Azzohaili, 2006; Al Ansari, 1424). Public properties remain under the ownership of the state or the community, but if revived, the ownership or the usufruct right may be possessed or captured by the developer, respectively. He can then transfer or exchange the acquired right with other agents. Accordingly, financial assets and titles to any stock of owned durable goods are transferrable in the market. Holding such a comprehensive view of property, it is worthwhile to explore the attributes of money and capital from this jurisprudential point of view.

### **Money versus Capital**

From the Fiqah point of view, money and financial capital are both property; their difference is jurisprudential attributes. In an Islamic contract, the financial asset that is paid in a sale contract can no longer be used for exchange with other commodities or assets. The financial asset paid loses its liquidity and its legal status changes from money to capital. The money holder enjoys the liquidity of his financial asset, i.e. money, prior to the transaction and is able to allocate it to any promising earning opportunity. After allocation, he loses the utility of his liquid asset. In return, he obtains the claim to the revenues that will be generated from a specific selected venture. Therefore, the financial asset that he holds is money prior to the transaction. After exchange takes place, the financial asset is capital, which will be combined with other factors of production to produce an output. What transforms the status of the asset through transaction is the legal attributes associated with the asset. In Shari'ah compliant property rights' system, ownership of money does not create any right to any source of income. When the money is invested and transformed to capital input, the owner obtains undeniable right to revenues from that venture.

This distinction is not discernible in the ribawi system. There, the money holder has the right to loan his asset and gain interest, or property premium and continue to maintain property rights to his money without participating in any revenue-generating activity. The lender does not share the profit or loss that may be generated from that activity. Interest and the principal are payable regardless of the outcome of the activity undertaken by the borrower. Both money and capital assets earn income, in the form of

interest and profit, respectively. Consequently, both money and capital have identifiable distinctive markets (Abdul Khir 2012).

It is helpful, here, to further clarify what constitutes a capital asset. Like money, there are many controversial views on capital among economists (Toutouchian 2009, 163-179). One definition that seems to be widely accepted is that it is a resource that generates a flow of income over time (Hershliefer 1970). Natural and man-made capital inputs, alike, suit well this definition. Financial capital identification, on the other hand, is subject to the underlying property rights' system. In ribawi economies, it may either be equity or debt-based asset, not necessarily backed by real capital asset. In an ideal Islamic economy, however, all financial assets are real based. Regardless of the real or financial form, capital asset represents a unique real asset in the economy. Entitlement to a capital asset evidently provides a flow of return over time while that to a liquid money asset creates utility. The reason that agents demand money to be able to allocate it to the best profitable investment or consumption opportunity, i.e. to transform money to capital, at minimal transaction costs. The cheaper and faster the access to financial market information the less demand for money for transaction purposes. *In short, money is an asset that could potentially be exchanged by any other good or asset.* However, as long as the exchange is not performed, money preserves its liquidity and can be freely allocated to alternative uses by means of any contractual agreement. When an exchange agreement is fulfilled, money is tied up to a specific use and gains a new legal status. *A financial asset that is actually allocated to a specific business or investment activity by a legitimate irrevocable contract is capital.*

The above jurisprudential distinction between money and financial capital is not discernible in ribawi system, where money and financial capital are often used interchangeably. Loaning of money does not necessarily specify the use of money; i.e., it does not explicitly tie it up to any specific consumption or production activity. The borrower is free to allocate the borrowed money to any purpose. "A loan's...fungibility gives the borrower command over any good or service that can be purchased. A loan provides additional liquidity or purchasing power for use in any of the borrower's production, investment or consumption activities" (Robinson 2001, p.143). Friedman (2010) argues that money can enter the utility function of consumers and production function of producers. His argument does not consider the jurisprudential attributes of financial assets. To combine capital and labor in a production process, the entrepreneur

has to contract separately with the owners of the said factors. The set of privileges and obligations between the latter and the entrepreneur are quite different. This set of rights distinguishes the utility of money holding from capturing a stream of revenues from capital investment. In Islamic property rights system, money can potentially be allocated to alternative uses. However, once allocated according to a legally binding contract, it can no longer be reallocated to another purpose. A legal exchange-agreement transforms the property rights of a liquid and non-productive asset, i.e. money, to a productive capital asset of lesser liquidity, and thus creates an entitlement right to share the gains and losses from the underlying activity. Thus, the main distinction between money and financial capital is their entitlement rights.

Is this characterization of money and capital discernible in an Islamic economy? If so, does it contribute to gaining knowledge about the role of money and capital in the economy? Considering the history of economy of the early Islamic state can provide an opportunity to study economic activities, including a model for both the real and the financial sectors, a brief review of the financial relations of this economy is presented in the following section.

### **Money at the Early Islam**

In the early period of Islam, Dinar and Dirham coins were used as the medium of exchange. They contained an amount of gold and silver equal to their nominal values. Each Dinar was equal to ten Dirham (Hasan-uz-Zamn 1981, p. 339). The Prophet of Islam SAAS sanctioned these coins as medium of exchange and the their conversion rate as it prevailed prior to Islam ( Heck,2004, p.12). His holiness also supervised the quality and the weight of the money in circulation and used to put the broken or damaged coins aside (Tabatabaei 1983). Following the holy Prophet, Dinar and Dirham continued to serve as mediums of exchange. It is reported that at the time of Imam Ali (AS) Baitul Mal engaged in minting gold and silver coins with the stamp of Baitul Mal on them (Mortadha 1988, Hasan-uz-Zamn 1981, p.331). Thus money at the early Islamic state was “commodity money” and it served as a medium of exchange. Barter transactions were certainly still common practices, but trade with Rome and Persia and commercial transactions in local markets were made with Dinar and Dirham. After the Prophet SAAS passing, almost all transactions were monetized.

Dinar and Dirham also served as units of account. Zakat, for example, was levied on their outstanding amounts at the end of the year. In fact, the state had sanctioned Roman

and Persian coins as the standard mediums of exchange (Hasan-uz-Zamn 1981p.339). This recognition could emanate from multitude of conditions that characterized the Islamic economy at that time. The Arabian Peninsula, being located between Asia, Africa and Europe, had comparative advantage in trade services. Persia and Rome were Muslims' main partners. Given the size of these economies compared to that of Arabia, it was logical for the local trading tribes in Arabia to accept their mediums of exchange. Moreover, Arabia had no strong state ruling over it almost two centuries prior to the advent of Islam. Naturally, no independent medium of exchange could have been introduced that would have been acceptable by their trading partners abroad. After the establishment of the Islamic state and the conquest of Persia and eastern Rome, Baitul Mal initiated coinage of independent money. However, due to martyrdom of Amirul Mo'amineen Imam Ali AS in the fourth year of his Khilafa and the events that took place afterwards, the new coins did not become the standard medium of exchange in all Islamic territories. Decades later, when the Umayyad dynasty was quite established, new coins were minted by Baitul Mal when Abd al Malik Marwan was ruling and became the standard money all over the state (Hasan-uz-Zamn 1981, p.335-6; Heck 2004, p.31).

It is observed that the types of money that were in circulation after the establishment of the Islamic state not only had intrinsic value but also bore all the criteria that contemporary competing economic schools have presented. According to the neoclassical doctrine, barter trading in Arabia turned into a monetary transaction in order to gain efficiency both in local and foreign commercial activities. The most suitable commodities that could serve as money were gold and silver and therefore the Dinar and Dirham coins (Dow, 2000). In the vision of Cartelist school, the said coins became the standard money because the Roman and Persian states introduced them as the standard medium of exchange and also the unit of account. The collection of taxes and preparation of national accounts were conducted using these units (Wray, 2000). Based on Keynes's theory, holding of Dinar and Dirham, compared to other assets, provided the liquidity that commercial entrepreneurs needed for their trading transactions both at home and abroad. The only theory that does not apply to money circulation at the early Islamic period is that of post-Keynesians, who argue that money is debt of the banking sector to the business community. Evidently, this theory does not apply to the "commodity money" which was in circulation then<sup>3</sup>.

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3. Setia (2014) quotes the view of al-Dimashqī (a merchant-scholar of the 6th/12th century) on money, which encapsulates the classical Muslim scholars' view on the matter. The latter explains eloquently reasons not only for choosing money as the medium of exchange, but further why people opted for gold to be the currency.

There was no loan market for money, commodity or asset in early Islam because lending and borrowing was allowed only by the means of Qard Hasan contracts. Paying and receiving of interest was prohibited. Gold and silver goods had regulated markets. Exchange of gold or silver for additional amount of the same was not permissible; as it fell under the ambit of riba. The same money was in circulation in both the Arabian and the Roman and Persian economies. Trade and the export of goods, particularly, to the latter economies increased the domestic supply of money in Arabia, while imports led to its decline. There was no tariff or quota on trade and no limitation of monetary reserves outside Arabia. There was no limitation on money transfer either. When there was a deficit in trade the merchants to export gold, a quasi money which was in abundance in Arabia (Heck 2004 p.xxii-xxiii). Thus the private sector maintained equilibrium between the demand and supply of money<sup>4</sup>.

The domestic price level had a significant role in traders' decision making. Domestic inflation, for example, signaled goods market imbalances of either excess demand in the goods market or excess supply of money. Consequently, they would choose to import goods to restore equilibrium in the economy. When the local Arabian economy suffered from deflation, they injected money to the economy by exporting goods and precious metals that were in excess supply and bringing in the money earned. What facilitated this function for the traders was the inter-country trade particularly during the Hajj period in Mecca (Hasan-uz-Zamn 1981, p.340). Large supplies of goods used to be brought to this city for the local sale or re-export. Since the trade and its financing were fully in the hands of private sector, balance in trade could lead to that of demand for and supply of money.

The circulation velocity of money was not constant during the time of Prophet SAAS, nor in the immediate period after him. During the time of the Prophet SAAS, Muslim's economy gained additional security and market opportunities with every victorious battle; thanks to the market development policies taken by the Prophet SAAS, including the merchandise insurance service that his holiness offered to non-Muslim traders (Mortadha 1988). With the growth of Islamic economy, barter exchanges

4. Gene Heck (2004) insists in the introduction to his book: *Medieval Muslim Money* that the early Arab traders, both prior to Islam and later had access to large precious metal assets obtained from the mines that were in place in Hijaz. He also argues that often these gold and silver bullions were used in trade and made up the trade deficit. Realizing the medium of exchange were Dinar and Dirham and also a measurer of weight, the traders considered gold and silver close substitutes for the currency in use. He cites many incidences that precious metals served as capital for trade and elsewhere.

were replaced by more and more monetary transactions. As a result the circulation velocity of money increased. When Muslims succeeded to conquer Makkah they could break Quraysh tribe's monopoly over foreign trade (Sadr1996 ). The free entry and exit condition of the new markets in Arabia and the extended trade with neighboring countries significantly increased the velocity of money. However, at any specific year, one can assume that it was invariable since victories did not follow the pace of time. Therefore, at any period of time, the demand for money was function of total output.

Although the answer to the two questions raised in the previous section with respect to the nature of the money and its role in the economy of the early Islam, should be clear by now, it would be more complete if we trace the transformation of the commodity money at the early Islam to that of fiat money at present following a conjectural history approach (Dowd 2000).

### **From Commodity to Fiat Money**

Suppose the Islamic economic system which was established at the rise of Islam remained intact during the following periods but the process of development of the economy followed its natural pace. At first we expect the Bait-ul Mal to continue coinage of Dinar and Dirham and to supervise the quality and weight of the circulated coins<sup>5</sup>. Overtime, the increase in the level of national output and volume of trade increases the transactionary demand for money, and voluminous amount of gold coins have to be exchanged for every large scale transaction<sup>6</sup>. The associated difficulties of getting access to coins and the risk of carrying great sums of them motivate trade partners to

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5. In fact this was the at the time Abdul Malik Marwan was the ruler of the Islamic state. According to Zarra Nezhad( 2004)"... when Abd al malik ibn Marwan came to know that borders of curtains imported from Rome were woven with proclamation of the Christian Trinity, he ordered this to be changed to a proclation of the Islamic creed in the textile factories of Egypt. It is in retaliation for this that the Roman emperor threatened to engrave blasphemy against the prophet on Roman coins. To solve this problem, the Islamic government sought to establish control of and improve the monetary system. Therefore, the government established legal Islamic dirham, and steadily expelled the old coins of its territory and the new money replaced them".
  6. In a review of money supply during the post Islamic era, Murat Cizaka (2011,p.46) concludes:"... Muslim coinage replaced the earlier imperial coins and spread rapidly and dominated the economies of Europe as well as India. Van Der Wee, an eminent Belgian economic historian, also confirms that remonetization of Europe after the *Völkerwanderung* and the rebirth of the European banking system owes much to the flow Muslim coinage to Europe."

trust one another and accept receipts, drafts, or promissory notes as means of payment<sup>7</sup>. As these new innovations gain increasing acceptance and usage, the Government would be prompted to consider issuing monetary notes, in place of the private notes, in order to facilitate the circulation of money and preclude any potential misuse of the private notes<sup>8</sup>. To ensure public acceptance of the printed notes, instead of gold coins, the government would guarantee the exchange of every issued one Dinar paper note with another one Dinar Gold coin. The business community, ultimately, would accept the new issued paper money and uses it instead of gold coins. The former has the added advantages of facilitating trade transactions, liquidity, relieving the impediments of carrying huge amount of gold coins, and promised government guarantee. To test the accountability of the government, the public would continuously exchange the monetary notes with gold coins from the public treasury. As the economy grows, however, and the number of transactions increases, the treasury's gold reserves would be depleting. This would occur in tandem with the increase in the volume of exchange of gold coins for paper money, and new sources of gold reserves will be scarce. Therefore, the supply of new gold coins will incur increasing cost for the government. In response, the treasury would seek new substitutes for gold. Consultations with the private sector and relevant research endeavors would perhaps bring the treasury to the conclusion that the national product may be considered as a substitute for gold coins. Such an announcement would imply that the treasury would provide one Dinar worth of goods in exchange for one Dinar monetary note. To gain the public's confidence and acceptance of the new unprecedented arrangement, the government would always maintain the nominal value of national output equal to its real value, i.e., the rate of inflation should be zero per cent. From the property rights' point of view, the treasury would become indebted to the public for the money it supplies. In other words, it

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7. -Hasan-uz-Zaman(1981,p.340) states that the development of trade made the checks and the bill of exchange even among the villagers which is evident from a poetic message quoted by Ibn Qutayba who died 276 after Prophet's Hihrah, i.e. migration to Madinah. Further, Murat Cizaka (p.47) comments that "International trade ... necessitated a whole spectrum on new financial instruments. Indeed, invention or other business instruments facilitating monetary transactions did not have to wait very long. Bills of exchange, letters of credit (saftaja), promissory notes, ordinary checks, and double-entry book keeping were all known to the Muslims. Historians are in general agreement that medieval Europe simply borrowed these instruments from the Muslims and could not improve upon them. Without these financial instruments long distance trade would have been impossible."
  8. "Ibn Abd al-Hakim indicates... that the second Caliph, Umar b. al- Khattab... paid for the grains delivered to his state warehouse by check. He also indicates that this ruler would pay governmental wages by check prepared by his treasurer Zayd b. Thabet..."(Heck 2006,p. 110).

would have no right to increase money supply without concurrently increasing the value of national output by equal amount.

It seems natural that the treasury's responsibilities for both fiscal and monetary policies would necessitate the creation of a new organization, called the Central Bank, to implement the necessary monetary policy and supervise the performance of private financial institutions, such that the treasury would concentrate on fiscal and welfare policies, alone<sup>9</sup>.

The private financial institutions would have a multitude of forms and functions but would, altogether, provide the services of financial intermediation in the modern economy; i.e. they would help lower their partners' financial transaction costs, manage risk, reduce search cost for the best investment opportunities and provide liquidity for deficit agents. Evidently, all services would be Shari'ah compliant.

### **Fiat Money**

In reality, the early Islamic economy did not remain intact and the development of monetary sector in Muslim economies followed its secular counterpart economies. However, still the Islamic property rights system makes it incumbent upon the present central banks to back each unit of fiat money by real commodities or assets. The money that they issue is standard of value. Like all other standard units of weight, maturity and volume, central banks have to preserve the purchasing power of money to be compatible with the Qura'nic rule of *Tatfif* (the Qur'an 83:1), i.e., prohibition of delivering goods less than the claimed quantity in exchange contracts and also the Prophet's (SAAS) legislated rule of prohibiting imposing harm or damage on any one, "*La dhararwa la dherarafy al-Islam*" (Sadr 1996). Following the holy prophet who used to put aside the broken and diminished gold and silver coins, central banks in states built upon Islamic property rights have to maintain the parity between the nominal and real value of the money. Therefore a unit of one Dinar, Derham, or Dollar fiat money must be equal to the same commodity money.

9 -Heck (2006) states that "... the Abbasid government in 316/928 created a state Central Banking agency known as *diwan al-jahabdhah*. Indeed as a result of the vigorous trade expansion that attended the rise of Islam, banks now rapidly proliferated throughout its empire in a variety of corporate forms. According to Nasir Khusraw in the year 444/1052 there were over 200 banks then engaged in both underwriting commercial activities and trading in precious metal bullions in Isfahan alone." The first central bank called Amsterdam *Wiesslbank* was founded in Netherland in 1609. The Central bank of Sweden was founded in 1694 and Bank of England in 1694. The Ottoman Bank was established in 1856 in Istanbul ( EdhemEldem, 1999).

As will be argued further below, modern money in Islam, i.e., the fiat money, is not a debt by the private banks or the central banks to the public, which is created by interest-bearing loan contracts that charges interest for the loss of the property premium (Heinshon & Stieger, 2000). Rather, banking in a riba-free financial system supplies money capital assets that are claims to real capital goods; created by entrepreneurs in their trade or production undertakings in the real sector of the economy (Ahmad 2015).

### **Capital and Debt**

Human labor and natural resources are the two main factors of production that have been endowed by Allah SWT to mankind. In return, the Almighty has prescribed a mission for His vicegerents on the earth; to develop the land (The Quran, 11: 61). The first stage of fulfilling this mission is to combine land and labor to produce capital. Capital is then used as input in subsequent production processes. Physical intermediate goods can be turned into an asset when the rights to their ownership, streams of revenue, or usufruct are exchanged in the capital market. All types of contractual agreements are permissible to ensure the most efficient use of both physical and financial capital, unless the property right rules of exchange are violated (Sadr, M. Baqer 1969).

Capital goods and assets could be sold on spot or on credit. When sold on credit, the buyer obtains the ownership right while the seller obtains a claim over the price of the transferred capital, which is a debt on the shoulder of the buyer. That is to say, in Islamic property rights' system, debts are backed by real assets. The only legitimate type of debt that is not necessarily backed by any real asset is Qard Hasan contracts. Therefore, the debt creation process in an Islamic economy does not create a market. Debt financing can only be settled at the par-price of the asset.

In non-sale contracts like Ijarah, where the ownership right is not transferred to the lessee, the owner can sell his claim at a higher price. The same right is preserved for partners in Musharaka contracts. Thus, equity financing lays the ground for creation of financial markets, as it preserves the proprietor's claim to a capital good; a stream of benefits or a share in a venture. In so doing, equity financing levels the playing field for asset based derivatives and capital market development. On the other hand and despite the legitimacy of debt financing, it does not lead to secondary markets. It can further be concluded that both equity and debt financing in Islamic financial system are backed by real assets. Even in the debt-creating sale contracts, unless "Mata'

” i.e. the commodity or the service, is exchanged with the “Thaman”, i.e. the price of the good or “Ra’s ul maal” which is capital, the contract is not complete. In other words unless a value added is created in the real sector by production, trade or a marketing service an equivalent monetary income cannot be transferred in the financial sector. This one-to-one relationship between the nominal and real sector, mandated by the Islamic contracts guarantees the coordination between the two sectors and the stability of the economy.

In short, Islamic financial markets are capital equity not debt based markets. Debt creation does not lead to financial market formation. Money which is the debt of the central bank to the public, as will be argued below, will not have a market in an Islamic property system.

### **Measures of Money**

The alternative measures of money, common in monetary economics, namely M1, M2 and M3, are not entirely compatible with the Islamic property rights’ standards. M1 includes cash and demand deposits. M2 consists of time deposits in addition to M1. Time deposits are collected in banks by the virtue of Wakalah or Mudharabah contracts, whereas the demand deposits are mostly based on Wadi’ah and Qard Hasan contracts (Faruq 2011). Islamic banks are not obliged to pay any return to holders of demand deposits. They are, on the other hand, required to act as Wakeel or Mudharib and transfer the due return to time deposits holders. In an Islamic economy, M3, which includes additional savings deposits, is no longer money. In fact, according to our contractual property rights’ criteria, M1 is money but M2, M3 and other higher numbered classifications of M are composite aggregates that include both money and capital. In alternative functional forms of demand for money, which have been formulated and estimated after Keynes, M2 is used to represent demand for money (Friedman 2010). It is now clear that such a function does not demonstrate solely demand for money by Islam’s property rights’ criteria. It is worth noting that several Islamic economists have estimated demand for money using the M1 definition of money (Kia&Darrat 2003, Esmaeeli, et.al.2012).

### **III. Clients, Banks and Central Bank Relationships**

Corollary to the stated money and capital property rights' vision, banks neither offer interest bearing loans nor create money in an Islamic economy. Their contractual relationship with depositors on the one hand and with clients on the other, is based on Shari'ah compliant agreements. For savings purposes, as mentioned above, banks accept money on the basis of Qardh Hasan contract for demand deposits and Wakalah or Mudharabah contract for time deposits. They fund entrepreneurs by ex-ante rate of return or profit sharing contracts. In effect, *they supply capital and not money to entrepreneurs*. Their intermediation between the deficit and surplus funds' agents is carried out by Shari'ah-compliant contracts. When they allocate fund to a specific productive activity, it can no longer be reallocated for other purposes. Otherwise it will be legally deemed as annulment of the contractual arrangement. Further, banks' financing of consumer goods promotes producers' profitability and consumer's welfare. In short, Islamic banks operations are intermingled with the commodity market; financial income cannot be earned unless equal value is created in the real sector.

Similarly, the financial services that are offered and demanded in the interbank market are all performed on interest-free basis. Banks that demand liquid assets may opt to sell some of their short term assets and those with idle excess liquidity may choose to purchase them. Since all bank assets are real-based, the interbank market is expected to develop into a short term capital market. As the length of the contract does not segment the structure of the market, it is worth noting that capital markets in Islamic economies expand and deepen compared to a non-integrated ribawi economy.

Islamic property rights' system applies to activities of the central bank and financial intermediaries, alike, and makes them riba free. The financial relationship between the central bank and commercial banks, in an Islamic financial framework, is also based on legitimate contractual agreements, which are backed by real assets. Central banks may supply financial capital to banks through fixed or variable rates of return contracts, not a lending-borrowing relationship. The central bank is no longer the lender of last resort; rather it is the financier of last resort. It does not lend any money to banks, unless through Qard Hasan, which is not the common practice now.

In order to preserve the purchasing power of monetary assets, the central bank may not always resort to notes' issuance or their removal from the circulation. In an Islamic economy, the state owns Anfal and Fai' natural resources, which include mines and barren lands. The development and utilization rights of these assets may be transferred

by both the government and the central bank to the public; by issuing Musharakah or Sukuk certificates. Private firms may also issue similar financial certificates to finance their investment enterprises. By exchanging these financial securities, a central bank can manage the supply of finance and money in circulation. The central bank may also indirectly influence the rate of return on financial assets. Since there is a reverse relationship between the assets' equilibrium price and their rate of return, the Central Bank can control the price, and subsequently the return to capital, through purchasing and selling the financial securities.

It is important to note that by eliminating the loan market, the system effectively prevents any opportunity for the nominal sector to decouple from the real sector of the economy. No financial assets or any derivatives can be developed on the basis of debt. In this economy, all financial wealth represents real properties. Banks do not create money; they only supply financial capital through their financing operations. Remembering that every note that the central bank issues should be replaceable by equally valued real goods or assets, it can be said that even the latter offers real asset-backed notes, or in other words, financial capital. Similar to the early Islamic era, when the nominal and the real values of Dinars and Dirhams were equal, the purchasing power parity of money will be maintained for the medium of exchange in the modern economy.

Governments and central banks no longer issue bonds. Public and private projects are financed by issuing shares or Sukuk. The central bank's new policy of supplying financial capital, rather than money, guarantees the coordination of the supply of finance and the growth of real output. As highlighted before, all cash transfers between the central bank and commercial banks are performed by legitimate and approved contracts. Borrowing from or lending to the Central Bank is not permissible, except by the means of Qard Hasan. The resultant sale and purchase of real asset backed securities ultimately indigenize central bank financing process, making it a function of the real sector performance.

The above discussion also clarifies the type of policy tools available to the central banks to control inflation or cope with recession. Open market operation, as represented by buying or selling of Shari'ah compliant securities, such as Sukuk and shares, is one possibility. The central bank finances or, more accurately, performs capital asset management, since each financial activity in the financial sector is linked to the real sector. Promoting or controlling aggregate demand in the financial sector it, in fact,

stimulates growth or controls inflation in the economy (Sukmana, and Kassim 2010).

## **V. Financial Implications of the Islamic Property Rights' System**

The main implications of changing the ribawi financial system into an interest-free system are the elimination of the loan market and the formation of a financial market, where all of the assets are real based. The new financial market is wholly dependent on the real sector, and no profit is earned without commensurate activity undertaken in the real sector of the economy. Thus, the two sectors will be in harmony and mirror image of each other. At the same time, bankers and stock market agents are expected to carry out their intermediation services in full. In the absence of speculative activities, harmony is achieved between the return on shares and the underlying investments.

In the ribawi system, the interest rate, determined in the money market, sets the minimum expected rate of return for selection of investment enterprises in the real sector. Any project with an expected rate of return lower than the interest rate will not be chosen, as investment in the money market is foreseen to be more profitable. Contrarily, in the interest-free system, the cost of capital is determined endogenously ex-post; i.e., the capital market determines the price of capital in a similar fashion to market determination of goods' prices in the commodity market (Shubber and Alzafiri, 2008). Thus the cost and revenue of investment projects is determined by the capital market and not by the money market.

Islamic stock markets are expected to be more transparent and their prices more efficient, as a result of the elimination of the loan market and absence of interest rates, the fluctuation of which affect bond prices and furnish the ground for speculative operations (Keynes 1965). Further, the enforcement of Islamic market rules of exchange, such as no harm; no external cost; no fraud; no hoarding; no *Kanz* and no barriers which may interfere with the smooth operation of the market and compliance with the Islamic ethical codes of behavior (Adebayo and Hassan, 2013) promotes harmony and dependency of stock market on capital market (Iqbql & Mirakhor 2011, Sadr 1996).

The contracts used by banks to collect deposits and transfer them to entrepreneurs are compatible with Shari'ah rules. Banks' assets are created in response to investment opportunities in the real sector. Financial assets, therefore, grow in proportion with the real wealth. Consequently, the balance between the growth of the financial and real

assets is maintained. Any disequilibrium in any of the sectors would soon be resolved, since the banks guarantee neither the rate of return nor the value of saving deposits. In fact, as Mohsin Khan (1987) has illustrated, the adjustment to macroeconomic shocks and banking crises and return to equilibrium is much faster in an Islamic system than it is in the ribawi system.

It is possible now to envisage the role of money, as conceived in Islam, in fostering economic growth: it is equivalent to the role of capital in promoting aggregate output. New financial derivatives can be designed if they entail new real assets. Property rights system in Islam, therefore, not only enhances economic growth, but it also harmonizes the financial and real sectors of the economy and provides stability to the whole economy (Askari, et.al.2010, Toutouchian, 2009).

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