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Models of Islamic Banking: The Role of Debt and Equity Contracts

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Islam and Debt

In itself, debt is innocuous. In accounting terms, it simply signifies an inter-personal or inter-entity relationship that is a liability of one party, the debtor, and an asset to the other, the creditor. Admittedly, Muslims have distinctive views on the acceptability of interest-bearing debt. Yet, one does not need to be a Muslim economist to attribute interest-based debt financing a major role in the global financial crisis and its aftermath (in fact in most financial crises in the past). Speaking in Hong Kong on 19 March 2012, IMF Deputy Director Zhu Min observed that if one adds together the household debts, the corporate debts, the financial sector debts and the government debts, the total debts among the developed countries vary between 300 per cent and 600 per cent of GDP. Dr. Zhu went on to add that debts are 'way too high' and that in this respect the world economy is not experiencing a classic financial crisis but a 'deleveraging process', moreover one in which economies are seeking to engineer growth while also deleveraging (Garvey, 2012). In the 'great slump' of the 1930s, the United States underwent 'debt deflation', in the words of Irving Fisher (1933), with the epicentre being the United States and its banking system. In the current situation, the epicentre of the crisis and downturn was again the United States and its banking system, but the pain of 'too high' debt has been borne across the developed world (Iley and Lewis, 2013).

Nevertheless, the Islamic objection to interest financing goes deeper than this. In Islam, there is no distinction between usury and interest. As a consequence, abolition of interest has become the hallmark of Islamic economics in modern times (Islahi, 2014). Both the Holy Qur'ān and the Sunnah treat interest as an act of exploitation and injustice and as such it is inconsistent with Islamic notions of fairness and property rights. Why is this so? For most Muslims, the answer is simple. The meaning and scope of *ribā* (literally 'increment' or 'increase') and its grave nature have been brought to light in the Holy Qur'ān (S2: 225). Its prohibition cannot be questioned as the verse 'Allah[1] permits trading and forbides *ribā*' is quite clear. Whatever the circumstances, the lender has no right to receive any increase or increment over and above the principal. Moreover, in the Aḥādīth, the next most authoritative source of Islamic law, the Prophet Muhammad (SAAW)[2] condemns the one who takes *ribā*, the one who pays it, the one who writes the agreement for it and the witnesses to the agreement (Algaoud and Lewis, 2007).

In the Islamic paradigm, the owner of capital can legitimately share the profits made by the entrepreneur, and the acceptability of that practice has provided the foundation for the development and implementation of Islamic banking. The basic building block is to link the return on an Islamic financial contract to productivity in the real sector and the quality and success of the project. In this way, the rate of interest paid by commercial banks to depositors is replaced by a pre-specified percentage share of the profits accruing to the banks. Success is measured by 'creating a healthy financial market in which debt is marginalized, and the bulk of financing takes through sharing modes of financing' (Siddiqi, 2014, p81).

Islamic Financing

Islamic banks, like financial intermediaries in any system, draw savings from surplus financial units and distribute funds to those who need finance. Conventional banks use interest-bearing loans as the basic contract for deposits and financing; depositors loan money to the banks

(1) Often written in English as "God". However, that does not reflect the true meaning of the Arabic word. See glossary in Intro-pages of this issue. [Chief Editor]

(2) For meaning, see glossary in Intro-pages of this issue.

on the promise of guaranteed principal and interest, and bankers seek the same when lending out funds. There is an extensive literature that regards such loans as an incentive-compatible arrangement (Dowd, 1996; Lewis, 2014).

In the Islamic alternative, financing of assets by banks is provided in a variety of ways, notably by sale on credit, leasing and sharing. On the other side of the balance sheet, funds typically come from three sources: shareholders' capital; depositors who place their funds on a safekeeping (*wadīʿah*) basis; and those investing depositors who want their savings used to generate returns which come from sharing of banks' profits through investment accounts.

A Two-Tiered System

For most Islamic banks, these three sources of funds are rolled into one. But, as a starting point, in line with Askari (2015), we can envisage two separate institutions: a safekeeping depository bank (Table 1) and an investment banking institution (Table 2). Both models are, in very different ways, proposed solutions to the longstanding problem of bank runs. Bank runs can arise when banks engage in fractional reserve banking and issue call or very short-term deposit liabilities, guaranteed at par value, against an illiquid and risky asset portfolio. The attraction of model 1 comes from there being no fractional reserve banking. This solution is most popularly associated with Friedman (1960), with a lineage dating back to Chicago economists in the 1930s (see Hart 1935), requiring banks to hold 100 percent cash reserves. Such an approach would remove the problem by making banks run-proof, but at the risk, as it were, of discarding the baby with the bathwater, for banks would be precluded from engaging in intermediation and would need to rely on safe-keeping and the provision of transactions services to attract deposits. Any efficiency gains which come from jointly producing payments and intermediation services are thereby eschewed (Lewis and Davis, 1987).

All financial intermediation activities would then be transferred to the investment bank which would collect funds through participatory investment accounts based on the *muḍārabah* principle and place the resources in Islamic modes of finance (sales, leasing and sharing), along with real estate investments, and complying equities, all generating

returns shared with the investment account holders. Despite such intermediation being based on the fractional reserve principle, Muslim economists argue that 'a system based on risk-sharing and equity finance is immune to instability' (Askari et al., 2012:3). One reason is that depositors are not provided with a guaranteed interest rate and return of principal on their invested funds. If the bank makes a loss, then the value of depositors' investment accounts are written down accordingly.

Table (1) ***Balance Sheet of 'Safe' Depository***

Liabilities	Assets
Founding shareholding	Reserves (gold, funds at central bank)
Currency in public circulation	
Demand deposits	

Table (2) ***Balance Sheet of Investment Bank***

Liabilities	Assets
Shareholders' equity funds	Cash reserves
Investment accounts	Islamic investments (sale, leasing, sharing)
	Real estate
	Equities

There are similarities here with another earlier suggested solution to the problem of bank runs and financial instability, which comes under a number of descriptions: 'mutual fund banking', 'unit trust banking' or 'marking deposits to market' (Giddy, 1985; Kareken, 1986; McCulloch, 1986). Basically, the idea is that banks operate as mutual funds, valuing and redeeming deposits according to the current market value of their asset portfolio (which could be more or less than the face value). If this were feasible, it is argued, the source of bank runs would be removed.

In order to assess the merits of such a suggestion, it is instructive to contrast it with 100 percent reserve banking. The former model (100 percent reserves) involves a separation of the means of payment function from the function of intermediation but keeps the means of payment and medium of account functions together. The alternative (mutual funds) approach separates the means of payment and medium of account functions (since transactions balances have a floating exchange value in

terms of cash), but apparently does not preclude combining payments and intermediation activities. In practice, however, for mutual funds accounts to be acceptable to depositors, relatively low price variability is likely to be required. To ensure little price movements, backing in the form of liquid marketable assets must be held, in sharp contrast to the investments with which banks have traditionally been engaged.

For such reasons, it seems unlikely that mutual fund banking – and by extension Islamic profit and loss sharing – would render the banking system truly invulnerable to runs. For mutual funds or investment vehicles or investment companies holding short-term, low-risk assets like Treasury bills, there are clear limits to the downside risk. When the portfolios are long-term assets, or there are large amounts of assets like leasing, let alone real estate or equities as envisaged in the portfolio of the Islamic investment bank, an incentive to 'beat the market' in the face of an expected price decline would seem to remain. For example, in Australia, the onset of the global financial crisis saw extensive withdrawals of funds from unlisted property trusts in advance of anticipated asset price write-downs which forced the trusts to freeze the funds and suspend withdrawals for several years. Thus, so long as maturity transformation and liquidity production are undertaken, the risk of runs would remain. Only when unit holders are sure that the pattern of asset dispositions that follow withdrawals cannot reduce the per unit value of the remaining asset portfolio will there be no incentive to join in the withdrawals. Islamic banks offering profit-and-loss sharing (PLS) accounts are not immune from such market pressures, especially in a mixed system.

How Islamic Banking Has Evolved

While Models 1 and 2 are interesting prototypes of the assumed replacement of debt financing by PLS arrangements, they do not reflect observed realities in Islamic banking and how the system has developed from its roots in Classical Islam, and is evolving now. In the formative years of Islamic banking, Muslim scholars expressed a preference for sharing over other modes of financing and many scholars still do so. Interest-free banking in its purest form is based on the concepts of *shirkah* (or *sharikah,* partnership) or *mushārakah*, and *muḍārabah* (profit-sharing). An Islamic bank is conceived as a financial intermediary

mobilizing savings from the public on a *muḍārabah* (trustee) basis and advancing capital to entrepreneurs on a PLS partnership basis. The two methods conform fully with Islamic principles, in that under both arrangements lenders share in the profits and losses of the enterprises for which funds are provided. The *mushārakah* principle is invoked in the equity structure of Islamic banks. *Muḍārabah* is used for investment accounts for depositors, and the Islamic bank manages the funds to generate profits subject to the rules of *muḍārabah.* If the bank in turn invests the depositors' funds on a *muḍārabah* basis, then the circle is closed in terms of the two-tiered or triple *muḍārabah* system. This is the position illustrated in Table 3.

Table (3) ***Balance Sheet of Two-tier Muḍārabah Model***

Liabilities	Assets
Muḍārabah investment accounts	*Muḍārabah/mushārakah* financing
Demand deposits (*wadīʿah*) basis)	
Reserves	
Equity	

Obviously, if Islamic banking took this form, it would be very different from conventional banking. The reality, however, is that neither *muḍārabah* nor *mushārakah* constitutes the main conduits for the outflow of funds from Islamic banks. In fact, both contribute little to the overall balance sheet investments of Islamic banks, except perhaps in the West where diminishing *mushārakah* is a major method used for residential property financing. Those familiar with finance literature would likely not be surprised by this result for there would seem to be significant potential for adverse selection and moral hazard to come into play under PLS financing modes, with Islamic banks attracting the more risky ventures while being unable under *muḍārabah* to exercise control over the borrowers' behaviour.

Once it was appreciated that PLS financing arrangements cannot cater exclusively for the peculiarities of a modern economy, in which financing is separated both in distance and time, and transactors may not be known to each other, a major challenge facing Islamic finance was to design a more diversified set of interest-free instruments. This challenge

was met by adapting permissible trading contracts, originally designed for the buying and selling of real goods, for financing purposes.

Monzer Kahf (2014) notes that classical writings on Sharīʿah endorse three essential sharing-based finance contracts, namely; equity sharing (*mushārakah*), equity sharing with a sleeping partner (*muḍārabah*) and crop-sharing (*muzāraʿah*). They also mention three sale-based finance contracts: deferred payment sale (*al bayʿ al ʻajil*), forward sale with cash advance (*salam*) and manufacturing finance sale (*istiṣnāʿ*). Classical writings also refer to leasing (*ijārah*) as a form of financial contracting. Kahf goes on to point out that in all of these seven kinds of contracts, the finance provider owns assets or commodities – which is essential in Islamic finance. One significant feature is the deferred payment sale at a higher than the cash price because it gives a demarcation of interest *vis-à-vis* financing sale.

From this springboard, Islamic intellectuals, jurists and bankers have spent much effort through the process of *ijtihād* examining the legitimacy of particular transactions and formalizing procedures which have enabled everyday banking, finance and commerce to be conducted on an interest-free basis using profit-and-loss sharing techniques, albeit in some cases loosely interpreted. For example, the first step in converting the original *murābaḥah* into a vehicle for financing was to make the extension of credit an essential feature of the transaction, by having the *murābaḥah* concluded as deferred payment instead of cash settlement. The second was necessitating that the sale contract be preceded by the customer's promise to buy the desired goods, upon acquisition by the financier. As soon as goods are purchased, they are immediately sold to the customer on a cost-plus mark-up basis, regarded as profit charged in a trade transaction. These actions reduce the bank's risk to a minimum, and the return becomes almost fixed and predetermined.

Similarly, profits earned by the Islamic bank from *ijārah* (leasing) are permissible, despite the obvious similarity of the profit rate to an interest charge. According to jurists, Sharīʿah allows a fixed charge relating to tangible assets (as opposed to financial assets) because by converting financial capital into tangible assets the financier has assumed risks for which compensation is permissible. These risks legitimize any

profits obtained. At the same time, however, conditions which attach to *ijārah* clarifying the risks to the lessor have been watered down by allowing operating leases to extend to financial leases in order to remove residual value risk and by shifting responsibility for maintenance and insurance to the lessee acting as agent for the lessor (Ariff and Lewis, 2014; Chapra, 2014). Leased assets form the basis of *ṣukūk al-ijārah*, the most popular *ṣukūk* structure due to their marketability and pre-determined returns, but again there is laxity as most *ṣukūk* are asset-based rather than asset-backed as required by Sharīʿah (see Razdi and Lewis, forthcoming).

The divergence of such mark-up financing from the ideal of PLS partnership financing (in which the profit-sharing is conditional upon the uncertain end-result or outcome of the project) has been, and continues to be, a source of disagreement between the practitioners, on the one hand, and the scholars, on the other. It has led some writers (e.g., Ahmed, 2011; Cizakça, 2011) to draw a distinction between a Sharīʿah-based approach (evolved from the original sources of Islam and built directly from the Sharīʿah) and a Sharīʿah-compliant approach (borrowed from the West after being made compliant to the Sharīʿah, that is, Islamically-modified conventional banking).

Quite clearly, the third model (Table 3), the two-tiered or triple *muḍārabah* model of which we have spoken, is Sharīʿah-based. Model 4 is the one-tier *muḍārabah* model on the liabilities side with multiple investment tools on the asset side, i.e., PLS and sales-based financing (Table 4). Such a model is both Sharīʿah-based and Sharīʿah-compliant and typifies where the system was a decade ago. By contrast, Model 5 involves fixed income liabilities with multiple related investment tools (Table 5). In this case, on the liabilities side there are fixed income deposit investment accounts by means of commodity *murābaḥah* or organized *tawarruq*, while the asset side comprises only mark-up modes along with other fixed income investments (*ṣukūk* and again *tawarruq)*. This model is entirely Sharīʿah-compliant. Islamic banking has evolved from Model 3 to Model 4, and there is a perception that it may be moving in some locales, and to varying degrees, towards Model 5.

Table (4) ***Balance Sheet of One-tier Muḍārabah with Multiple Investment Avenues***

Liabilities	Assets
Muḍārabah investment accounts	*Murābaḥah*
Demand deposits (*wadīʿah*)	*Ijārah*
Reserves	*Istiṣnāʿ*
Equity	*Muḍārabah/mushārakah*

Table (5) ***Balance Sheet with Fixed Income Liabilities and Related Investment Avenues***

Liabilities	Assets
Fixed income accounts (*tawarruq*)	*Tawarruq*
Demand deposits (*wadīʿah*)	*Murābaḥah*
Reserves	*Ijarah*
Equity	*Istiṣnāʿ*
	Ṣukūk

What can be said unequivocally is that Islamic banks go to considerable lengths to ensure that their returns follow benchmark conventional market interest rates, such as LIBOR, and that the loss-sharing option is not exercised, which is done by maintaining an investment risk reserve (IRR) and profit equalization reserve (PER) to mitigate DCR, displaced commercial risk, where the risk of losses facing investment account holders is displaced to shareholders (Archer et. al., 2010). Islamic bankers know that, in a mixed system competing with conventional banks offering guaranteed deposits, they would be destroyed if losses were passed through to depositors.

How Islamic Banking is Evolving

The advent of *tawarruq* marks a new development for Islamic banking. Where permitted, organized *tawarruq* or 'commodity *murābaḥah*' can operate on both the asset and liabilities side of the Islamic bank balance sheet. On the liabilities side, the technique can mobilize deposits as follows. First, the client buys commodity on spot basis from broker A. Second, the client sells the commodity to an Islamic bank using *murābaḥah* on deferred basis (cost plus profit). Third, the Islamic bank sells the commodity to broker B on spot basis and obtains the cash

(actually the deposit of the client). Fourth, the Islamic bank makes the payment to the client of the deferred and higher price upon maturity.

By such means, the Islamic bank receives cash (as deposit) and pays it back to the depositor with a mark-up. In the process, the liability side normally dominated by multiple *muḍārabah* is transformed into fixed return yielding conventional deposits (Cizakça, 2011, p148). On the asset side, *tawarruq* operates as follows. First, the Islamic bank buys commodity (e.g., metal) on the spot from broker A. Second; the bank sells this commodity to the client using *murābaḥah* on deferred basis (cost plus profit). Third, the client sells the metal to broker B on spot basis and obtains the cash needed or, alternatively, the bank sells the metal on behalf of the client to the broker, obtains the cash and passes it to the client. Fourth, the client makes periodic payments to the Islamic bank to cover the deferred price (Cizakça, 2011, p.146).

While some Islamic banks practise *tawarruq,* the Islamic *fiqh* Academy in 2009 declared organized *tawarruq* illegal as it entails elements of *ribā* and does not conform to the true classical form of this technique (Habib Ahmed, 2011, p.50). Nevertheless, some Sharīʿah scholars regard it as being still preferable to 'conventional personal finance principles' (Housby, 2011, p.68).

This last position can be disputed. What distinguishes *tawarruq* from the other sales-based financing techniques is that, as the examples above illustrate, *tawarruq* goods are purchased and sold only as a vehicle for obtaining cash. Goods do not end up with final users who actually employ them for their own industry or consumption (Kahf, 2014). As Volker Nienhaus observes:

> "Islamic banks provide unrestricted liquidity to their clients by using contractual arrangements in which neither the bank nor the client has any genuine interest in the underlying real asset (as in the case of *tawarruq* or commodity *murābaḥah* for liquidity purposes). Such contracts would allow the use of the same asset over and over again in different transactions, and the result would be a detachment of finance from the real economy and also possibly an accumulation of Sharīʿah-

> compliant debt in the balance sheet of the client (i.e., leverage). (Nienhaus, 2014, p.580)."

This is a serious charge. One of the 'claims to fame' of the Islamic system, voiced in particular in the wake of the global financial crisis, is preventing excessive leverage and avoiding a build-up of debt divorced from the real sector. If this claim is diluted, what is left? Where is the system heading? Not so long ago; it was unthinkable to even talk about a tradeable Islamic bond that would guarantee a fixed return. Now they exist, with 'financially engineered' payoff profiles used to generate returns that are, being derived from a 'cost plus' rate of profit, albeit from asset-based rather than asset-backed structures, and accompanied by purchase undertakings, as fixed and guaranteed as any interest-based instrument. Are fixed-return, negligible risk, Islamic securities based on mark-up financing techniques pioneered by Islamic banks needed if Islamic finance is to rival conventional finance? Or do these instruments go too far? Is the Islamic financial system torn between the market success of emulating conventional structures, on the one hand, and on the other hand developing modes that reflect its spiritual ethos (Agha, 2012)? These are, indeed, questions to ponder by those concerned about the future directions of the system.

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