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# ISLAMIC BANKS: PROFIT SHARING, EQUITY, LEVERAGE LURE AND CREDIT CONTROL

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## Abstract

This paper deals with three basic issues in Islamic banking: First, how the profit sharing ratios in mudaraba contracts are in principle determined? Second, do the actual sharing ratios result in an equitable division of profit between the banks on the one hand and the depositors on the other? Finally, can the central bank use the profit sharing ratio along with the rate of interest for credit control so as to mitigate leverage lure in a dual banking system?

The paper provides an explanation as answer to the first question. The response to the second is negative but positive to the third. It suggests a policy tool the central banks can possibly use to prevent the sort of credit turmoil as the world is facing today in 2008 because of leverage lure. The tool may also help improve return to investors and thus establish some equity in the distribution of profits.

Key words: Islamic banking; Two-tier mudaraba; Profit sharing ratio; Division of profit; Leverage lure

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## 1. Introduction

I had explained earlier in an article the determination of the ratios for sharing profit on investment between the firms and the Islamic banks assumed as operating in competition with their mainstream interest-based counterparts in a dual banking system (Hasan 1985). That assumption became a reality when Malaysia allowed mainstream banks to open Islamic windows.<sup>1</sup> The main determinants of profit sharing ratio the (PSR) for the banks were identified as (i) the expected rate of profit ( $r$ ) on investment, (ii) the proportion ( $\lambda$ ) of bank money in total capital ( $K$ ) firms employed in business, (iii) the market rate of interest ( $r_i$ ) and (iv) the risk value estimate ( $\alpha$ ). The issue was dealt with at the macro and micro levels and showed that in principle the Islamic system had superiority over interest bearing mainstream banks both in matters of returns and stability.

The main elements of the 1985 work were incorporated later in a comprehensive discussion on mudaraba that dealt at some length with reasons of its relative unpopularity

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<sup>1</sup> The policy has of late been modified. Mainstream banks are now encouraged to have exclusive Islamic subsidiaries instead of windows. The subsidiaries fall under the governance of the Islamic Banking Act 1983 while windows are covered by the BAFIA of 1992. However, there is yet no legal bar on opening the windows.

in modern times and suggested ways to overcome the difficulties (Hasan 2002). In the present paper we shall desist from going over the material and areas already covered in these writings, more so because they have already become a part of the knowledge on the subject<sup>2</sup>.

However, some misgivings and several new developments in the area have prompted the current revisit to the area. I am grateful to Shamim Ahmad Siddiqui (2008) who in his contribution provides a critical appraisal of the theoretical models that incorporated the PSR issues in Islamic banking over the years. His survey especially highlights striking similarities the model of Anwar (1987) has with that of Sargent (1979) and notes that the former has merely replaced the rate of interest ( $r_1$ ) with a rate of profit ( $\Theta$ ) to make the latter look Islamic (P.250-251). Because Anwar assumes  $\Theta$  as known,  $k\Theta$  in his model, according to Shamim, just works as the rate of interest and that is “why all of the model appear to be similar to the conventional classical or Keynesian model” (p.254).

Another paper that has received a major part of Shamim’s attention is of Mohsin Khan and Abbas Mirakhor on the Islamic financial system (1989). Here, he provides clarifications to uphold some of the positions the authors have taken. One major blemish of Islamic banking, Shamim argues, is the sparing use of the profit and loss sharing modes on the assets side of the balance sheet which could alone necessitate any meaningful change in monetary policy and the tools used for its implementation. One may find no difficulty in agreeing with him on the point. In his survey two of my writings alluded to above dealing with the sharing of profit ratios also invited Shamim’s comments. Indeed, some of his ideas spurred me to look afresh on the ratios’ issue.

The present paper has three basic objectives.

1. To have a look at the sharing ratio theory and the way that ratio is being currently used in Islamic banking. This is an addition to my earlier deliberations on the subject and is taken up in the following Sections 2 and 3 of the paper

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<sup>2</sup> The 1985 and 2002 articles have often appeared as references in the writings on Islamic finance. Both have been downloaded or their abstracts accessed on the internet at a combined average exceeding 3 a day over the past 12 months ending August 2008. Web: <<http://logec.repec.org/RA5/pha42htm>>

2. In section 4 we take up the important issue of the adequacy of return banks provide to the depositors on investment deposits. We shall investigate if the prevalent profit sharing ratios result in a fair distribution of profit between the bankers on the one hand and their clients on the other, and if not what can be done to remedy the situation.
3. To review whether the central bank could use the sharing of profit ratio, as is at times suggested, for controlling credit, assuming that Islamic banks can and do create credit. I have discussed this issue in a recent paper (Hasan 2008) and add some more observations to the argument here in Section 5.
4. Finally, Section 6 contains a few concluding remarks.

## **2. Profit sharing theory**

The initial theoretical models of interest free banking were based on the view that ‘no risk, no gain’ *alone* was the principle in Islam for organizing banking operations. The claim got inspiration presumably from the early days of Islam when *mudaraba* was the dominant mode for financing specific business projects or trading partnerships. That the claim was only partially true has already been demonstrated (Hasan 2005). There can be areas such as leasing or mark-up pricing where gain can arise without virtually involving any risk in an Islamic contract.

It may be mentioned that the notion of profit sharing pervaded even conventional business organizations, let alone Islamic finance. For example, mainstream economics now sees profit in sharing profit with labor to the extent it helps maintain industrial peace. In partnership contracts also it allows profit sharing ratios for some of the participants to differ from their loss sharing ratios as in *mudaraba*.<sup>3</sup> The partnership contracts define profit sharing ratio as the one in which profits or losses of a business are shared as set out in the agreement. The ratios are usually expressed as a percentage of the total profit each partner will get. In some agreements there is a first charge on profits, the remainder is then distributed according to the profit sharing ratios the agreement

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<sup>3</sup> In fact, *mudaraba* was a pre-Islamic mode of profit-sharing finance that flourished as a dominant form of business organization around thirteenth century in the Muslim lands.

contains. The profit sharing ratios are in general proportionate to capital contributions of the partners but *that need not always be the case; the agreement may specify a different ratio for any of the partners*. Thus, there are resemblances between *mudaraba* on the one hand and modern partnership contracts on the other. However, differences between them, especially because of the different treatment of the interest factor are much more significant. For example, in conventional partnerships the profit and loss sharing ratios of partners are mostly the same as their capital contributions but in *mudaraba* the two are invariably different. Also, the non-intervention of the financier (bank) in the management of business is a *mudaraba* imperative<sup>4</sup> but in conventional partnership no partner can automatically be excluded from participation in managing a firm's business unless he agrees to be a sleeping partner.

*Mudaraba* is a contract in which a financier, say a bank, provides funds to an entrepreneur (firm) for investing in a business venture to share profits in an agreed proportion, the loss falling on capital alone.<sup>5</sup> This view implies what we may call a *pure mudaraba* model where the financier is assumed to provide the *entire* capital to an empty handed entrepreneur; the model fits well even today to small partnership businesses to undertake specific projects<sup>6</sup>. But the modern economic scene is dominated by large corporations that have long eclipsed small proprietary businesses. Likewise, banks have almost completely replaced personal financing of the earlier era with institutional arrangements. What realistically fits in the present situations is the model of what we can term as *mixed mudaraba*, where the bank is an outside financier providing fund to running businesses on a profit sharing basis. Corporations operate mostly with their owner shareholders' money supplemented by bank finance, if need be. Banks likewise finance many and varied sort of businesses simultaneously.

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<sup>4</sup> We restrict discussion here to *mudaraba* though *musharakah* is also a profit sharing arrangement. The reason is that the latter is akin to equity financing in modern corporations.

<sup>5</sup> Paraphrasing Bank Negara Malaysia, *mudaraba* is an agreement made between a party who provides the capital and the other - an entrepreneur - who is thus enabled to carry out business projects on the basis of sharing profit in pre-agreed ratios. However, losses, if any, are borne solely by the provider of funds. Bank Negara Malaysia <<http://www.bnm.gov.my/index.php?ch=174&pg=469&ac=383>>

<sup>6</sup> It is this classical puritan model of *mudaraba* that underlies the discussion in many writings on the subject including that of Shamim.

In a *mixed* mudaraba model - first mooted in Siddiqi (1975) - the bank provides  $\lambda$  fraction of total capital  $K$  invested in a business. Thus, borrowed amount of money  $L$  divided by  $K$  equals  $\lambda$ .  $\lambda$  operates both as the loss sharing ratio for the bank as also the leverage measure for a firm. It makes the business owners' portion in capital equal to  $(1-\lambda)K$ . Of course, losses if any will be shared between the firm and the bank in the same ratios as are their capital contributions i.e.  $(1-\lambda)$  and  $\lambda$  respectively.

Profit sharing applies to earnings that are allocable to the part of capital  $K$  a bank provides to the firm. Thus, if  $P$  were distributable profits,  $\lambda P$  would be allocable to bank finance. It is this part of profit which is the subject matter for sharing with the firm. Negotiations between them lead to the decision that a fraction of this, say  $\sigma^*$ , will go to the bank and the remaining  $(1-\sigma^*)$  the firm will retain for entrepreneurial services it rendered to make bank money earn a return. It is easy to see what goes to the bank is a smaller fraction, say  $\sigma$ , of *total* profit  $P$  than  $\sigma^*$ . For,  $\sigma^* \lambda P$ , the bank's profit share, divided by  $P$  would equal  $\sigma^* \lambda$ . In  $\sigma = \sigma^* \lambda$  both  $\sigma^*$  and  $\lambda$  being less than 1, their product  $\sigma$  must be smaller than either of them. The derivation of  $\sigma$  allows the treatment of the ratio issue at the macro level and helps construction of models to show that profit sharing ratio is a function of the variables identified earlier i.e. the expected rate of profit  $r$  on capital  $K$ , the proportion of borrowings  $\lambda$  in it, the market rate of interest  $r_i$  and the risk premium  $\alpha$ . We have shown earlier that the sharing ratio for bank would be as under (Hasan 1985):

$$\sigma = \frac{\lambda}{r} (r_i + \alpha) \quad (1)$$

Thus, in a competitive setting the sharing ratio  $\sigma$  at the macro level varies inversely with profit expectations  $r$  and directly with the remaining three determinants  $\lambda$ ,  $r_i$  and  $\alpha$ . We shall use this result in the following Sections.

### 3. Profit sharing in practice

Many banking companies, notably in Pakistan and now in Malaysia<sup>7</sup>, have been successful in mobilizing large amounts of money from the people in the form of deposits

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<sup>7</sup> Shanam Mokhtar informs us that in Malaysia the general investment account (GIA) is the largest type of deposit held by Islamic banks. It mobilizes about 33% of total deposits in the Malaysian Islamic banking sector. GIA has continuously outperformed other types of deposits, mobilizing about RM40 billion

and publicize their profit sharing ratios as well. To illustrate, for the RHB-Islamic mudaraba is a term deposit “based on the concept of profit sharing. Under this concept, customers will provide the capital for the bank to invest for a fixed duration. The profit earned from the investment will be shared as dividend between the customers and the bank in the predetermined profit sharing ratios”.

Investment accounts are classified as *general or unrestricted* where the bank is free to decide the use of funds; and *special or restricted* where the customer has specific avenues to choose from; other rules of the game remaining the same. The minimum *initial* deposit size for the General Investment Account is RM 5000 for one month or RM 2500 for two months; after which the deposit could be invested for specific tenure ranging from 1 to 60 months. For Special Investment Accounts the required minimum deposit amount is RM 100,000 for inflexible duration of 365 days. The profit sharing ratios are claimed to be the result of negotiations between the parties. This is not true. Banks invariably use *standard form contracts*; signing on blank spaces is neither expressive of free will nor of negotiation.

Habib Bank of Pakistan announces each quarter two sets of profit sharing rates for the depositors: (i) declared for the preceding quarter and (ii) the probable ones for the next. It first apportions gross revenue into 30% for the bank and 70% for the depositors. It may be presumed in the absence of required information that profit allocable for distribution is divided between various deposits categories on the basis of weight assigned to each. Profit rates are then calculated and declared for separate categories <sup>8</sup>

Table 1 provides the types of deposits, and the profit rates as well as the weighting system for the quarter ending June 30, 2008. A perusal of the data on the ratios obtained from the websites of four other Islamic banks including RHB, Standard Chartered Saadiq,

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(US\$11.43 billion) to RM60 billion (US\$17.15 billion) at the end of each month since January 2008. IFN, Vol. 5, Iss.10, Oct. 08 p. 16

<sup>8</sup> The website does not provide explanation as to why PSR is applied to gross revenue in the first instance, how net profit going to depositors is calculated or what is the basis of assigning relative weights to different types of deposits.

<sup>10</sup> The remaining four banks have patterns closely similar to that of Habib Bank. Tables for them are not produced for that reason

Meezan and Dawood reveals the same pattern as f Al Habib shown in the Table. Some interesting common features - albeit varying in details - of banks' sharing profits with their depositors are as under.

**Table 1:** Habib Bank - Profit Distribution for the quarter ending June 30, 2008

	Million Rupees	Profit rates %	Weights Assigned
<b>Savings</b>	Less than 1	5.20	0.65
	1-----10	5.50	0.67
	10-----50	5.75	0.70
	More than 50	5.90	0.72
<b>Term Deposits</b>	<b>Duration</b>	--	--
	7 Days	--	0.72
	1 month	6.0	0.75
	3 months	7.5	0.80
	6 months	8.5	0.90
	1 Year	10.2	1.10
	3 Years	9.5	1.25
	5 Years	--	1.30
	Equity Fund	--	1.50

Source: Constructed from the data reported at the website of the bank.

1. Deposits are accepted in investment or saving accounts; the investment category is further divided into general and special.
2. The profit sharing ratio varies from 30% to 40% for the bank; the other part is allocated to the depositors. Some banks apply the ratio in the first instance to gross revenue and then distribute profit among the depositors allocable to their share of gross revenue.
3. The distribution of profit among the depositors in the pool varies with category; savings receiving lower proportion than investments. Within the category, rates of profit mostly move up with the amount and duration of deposits. We could not obtain information on how individual banks arrive at these rates.
4. Banks included in the study all claim that the profit sharing ratio is the result of negotiations with the depositors. One is not sure if depositors, especially the smaller ones really have negotiating power and get opportunity to exercise it; or they simply sign on the dotted lines in the bank documents.
5. The loss if any is borne by the depositors pro rata; the assumption being that banks have no moneys of their own to invest or keep it distinctly separate from that of the

depositors in matters of investment. The pure mudaraba model is implied operating which is most unlikely in modern times.

In any case, the question is from where the profit to be distributed among the depositors comes? Sufficient data is not available on the uses of funds side of Islamic banks. The information on the sharing of profit ratios between the banks and the firms they invest the money of their depositors is all the more scanty.<sup>9</sup> The paucity of data does not allow a fuller investigation into the appropriateness of profit distribution in Islamic banking

#### **4. The equity question**

However, the question of fairness concerning the return the customers receive on their deposits in Islamic banking is of vital importance. For, fairness and justice is what Islam essentially stands for. Sharing of profit is mandatory in Islamic banking but of essence is what such sharing results in? In other words, what it gives to the depositors compared to the owners (shareholders) of bank in the mixed mudaraba contracts.

Let us preface the discussion on the point with an observation: history bears evidence that financing has ever been an instrument in the hands of the rich used against the poor for exploitation and oppression. In the past, the flow of funds in the form of loans was *from the rich towards the poor*; interest rates were kept high rather exorbitant even as most of borrowings were for consumption purposes. The poor suffered. Today, the flow of funds with banks operating as intermediaries is from the *poor towards the rich* as major part of national savings comes from the lower and middle income groups; it is pooled in provident and pension funds or insurance premiums. The funds so pooled go through the banks to the rich business tycoons of the community owning and controlling big businesses. The rates of interest are kept low; cheap money policy dominates modern economies. The multitude of depositors relatively poor from the lower rungs of society is

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<sup>9</sup> The Malaysian Economic Report 2008/2009 reveals two interesting features of Islamic Banking in the country. First, among the deposits the substantial (26%) and the highest growth (47.8) category of deposits over the two years is unspecified 'others'. Second, bulk of the financing (60%) goes to the household sector signifying the dominance of fixed return murahaba in microfinancing and expanding credit card business; other sectors - agriculture manufacturing trade and insurance – put together receive the remaining 40% .(The New Straits Times Supplement 30 August 2008, P.7)

cut off from high returns their savings help businesses earn by low interest rates they get. Inflation is the order of the day and reduces their real value further. Cheap money policy makes the rich available deposit funds just for a song to magnify their profits via leverage<sup>10</sup>. Thus, the free enterprise system was unjust and exploitative of the poor in the past; so it is today, thanks to the institution of interest.

The return to depositors in Islamic banking has made the situation no better; rather it seems to worsen it further. The situation has to be blamed mainly on the use of *standard form contracts*. The rates of return depositors are normally getting are not much different from the corresponding interest rates {See Table 1} offered by the conventional banks on customer deposits.<sup>11</sup> “The Bank for International Settlement reports that commercial banks earn anywhere from 11 to 31 percent per year as ROE going to their shareholders (the profit to bank owners after covering *all* costs). If there is true profit sharing in the promotion of profit-shared banking as is so earnestly being shoved into the Muslim conscience, is a rate of profit share that is equal to the conventional “interest rate” of roughly half the 11-31 percent going to the (bank) shareholders just? Common sense (leave alone the notion of justice as in Qur’an) would suggest that profit share is totally misunderstood in Islamic finance.”<sup>12</sup> There is no solace in win-win situation if some take away the lion’s share at the cost of the others. The concept of profit sharing loses meaning if it is divorced from the basic norms of justice and fair play Shar’ah insists on promoting. How can this be done is a complex question but the key presumably lies in central banks exercising some control over the profit sharing ratios

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<sup>10</sup> To illustrate, the bank in New Delhi where I maintain a NRE account offered me on October 1, 2008 a long-term deposit plan for 10 years. Return of capital was guaranteed with the promise of a 10 – 12 percent annual return arising from a structured investment; the officer explained that the structure was composed of Government Securities, Infrastructure Lending and Equities; the annual yield being 30, 35, and 30 – 38 percent respectively. The return offered being around a third of what the bank would get on my money, looked unfair but I was told that it as a ‘take it or leave it affair’. The inflation running in double digits, it was otherwise also a losing game. I declined the offer and invested the money in real estate.

<sup>11</sup> This author raised this point in a internal seminar INCEIF held on August 28, 2008 on *Settlement of Islamic Finance and Banking Disputes: Issues and solutions* where bankers and Shari’ah scholars were the panelists. The justification a banker who also presented an excellent paper to form the basis for discussion provided was that Islamic banks, unlike their mainstream competitors, do not impose any penalties on depositors for premature withdrawals of their money. One is not sure how significant are such withdrawals.

<sup>12</sup> I endorse this observation an unknown referees made in comments on the earlier draft of this paper.

Classical jurists mostly conceived of *mudaraba* in its puritan form where the entrepreneur (*mudarib*) was empty handed all money for business coming from the financier (the *rub-ul mal*). The pronouncements on the magnitude of profit sharing ratio for the financier were based on this view of *mudaraba*. Varying ratios were considered allowable by different schools and scholars, the Malikis allowing up to 50% for the financier (Hasan 1985). Such high sharing ratios could be considered just in that version of *mudaraba* and the tiny scale of business operations. In *mixed* *mudaraba* of today and large scales of operations the 30-40 range can be shown as exploitative of the depositors.

Let us assume that in a project total bank finance is RM 10,000 (K). Of this the bank provides 4000 ( $K_B$ ) or  $2/5 = \lambda$  of K and uses deposits worth RM 6000 ( $K_D$ ). The PSR, or  $\sigma^*$  for the bank, is 30% and the project ends with a profit P of RM 4000. Under mixed *mudaraba* rules 40% of profit ( $\lambda P$ ) = RM 1600 accrues to the bank on  $K_B$  and the remaining RM 2400 to the depositors. Now, of the latter amount 30% or RM 720 will be the profit share for the bank; the remaining RM 1680 will be available for distribution among the depositors. Thus, the total profit going to the bank would equal  $1600 + 720 = 2320$  giving it a return on  $K_B$  equal to 58%, while the depositors will get on ( $K_D$ ) just 28%. The gap between the two returns equals 30% even as the risk exposure for both was the same. . The reason is the high profit sharing ratio for the bank. What sharing ratio will keep the gap reasonable, say 10%? We explore below if a solution were available.

Presumably, one must target the *leverage gain* available to banks in Islamic finance as a control variable.<sup>13</sup> The recent failures of such giant financial institutions as Lehman, Merrill Lynch and the AIG seem stoking the same sort of fear of debt in the US and Europe as in Japan during the 1990s. The facts of the Japanese case broadly were these. The Nikkei index peaked at 38,916 on December 29, 1989 at the end of a five year orgy of debt-fuelled speculation centered largely on the real estate market. During the fat years, banks lent against property in the confident expectations that prices would never fall, but from 1990 share prices started a 13 year decline, punctuated by sharp rallies. The Japanese were undone by the deception of rising leverage gains. Soon the lure became

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<sup>13</sup> It seems to me that the lure of unbridled leverage gains may have something to do with the cloud that Taqi Usmani recently cast on *sukuk* and the Malaysian court declared BBA contracts banks executed invalid. Both are permissible in Islamic law; documentation spelling out the conditions went wrong.

the demon of ‘*de-leveraging*’ starring them in the face: they had to pay the price.<sup>14</sup> Leverage must all the more be a matter for concern in Islamic finance as Islam, apart from placing emphasis on equitable distribution, does not encourage borrowing in principle: companies that have too much borrowing i.e. a debt ratio of more than 33% of their stock market value stand out of bonds. Such criterion means that Shari’ah-compliant investors are to steer clear of highly leveraged banks conventional or Islamic.<sup>15</sup> Indeed, it is time for the world as a whole to be wary of loans.

Going back to our main argument, let us postulate that the central bank allows an Islamic bank the leverage gain not to exceed 10% additional to the rate of profit on total capital  $K (= K_B + K_D)$  it had invested in business. Beyond that all profit is to go back to the deposit holders. Now, in the above illustration, the return on capital employed is  $[(4000/10000)100]$  or 40%. So, the bank can have under the constraint a maximum of  $40\% + 10\% = 50\%$  return on its portion of capital (4000) i.e. it cannot have more than RM 2000 as profit. Of this 1600 has already accrued on its capital. So, it will have another RM 400 from the remaining profit to fill the allowable gap. This leaves RM 1600 for distribution among the depositors that would give them a return on  $K_D$  of 33.3 percent. The constraint would thus reduce the profit sharing ratio  $\sigma^*$  for the bank from the original 30% to 16.67% in an *ex post* adjustment.<sup>16</sup> We may thus state that the Islamic banks are free to negotiate the PSR with the depositors subject to the provision that their leverage gain will not exceed by more than  $\mathcal{G}$  percent over the rate on  $K$ . Let us fix the rule using the symbols in our illustration.

The rate of profit on capital employed  $r = P/K$  and the maximum leverage gain allowed to the bank is  $\mathcal{G}$ . The upper limit for return on  $K_B = \lambda K$ , therefore, is  $r + \mathcal{G}$ . The

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<sup>14</sup> The story is being repeated in the US. The sub-prime debacle has certainly put the economy into recession that may continue for years despite the massive \$700 billion bailout effort. There has already been a loss of 71,000 and 159, 000 jobs in August and September 2008 respectively. A separate Labor Department survey of households put the unemployment rate at 6.1%, a five year high [TOI, P.22].

<sup>15</sup> See ‘*Faith-based finance*’. The Economist (print edition) Sep 4 2008

<sup>16</sup> The bank gets 1600 as profit accrual on its capital and the remaining 400 from 2400 allocable to depositors. Thus,  $\sigma = 400/2400 = 16.67\%$ .

profit allocable to the bank is  $\lambda P$  but it also gets  $\sigma^*$  fraction of profit allocable to deposits i.e. of  $(1 - \lambda) P$ . Thus, we may set up

$$\frac{\lambda P + \sigma^* (1 - \lambda) P}{\lambda K = K_B} \leq r + \mathcal{G}$$

This reduces to

$$\sigma^* = \frac{\mathcal{G}}{r} \cdot \frac{\lambda}{1 - \lambda} \quad (4)$$

Notice that  $\frac{\lambda}{1 - \lambda}$  is equal to  $K_B / K_D$ : an alternative expression for leverage.

It is obvious that for any given values of  $r$  and  $\lambda$  the PSR would vary directly with  $\mathcal{G}$ . Thus,  $\mathcal{G}$  can be a policy variable that the central bank of a country can use for mandatory *ex post* adjustment of the PSR in Islamic finance to enforce fairness in the distribution of mudaraba profits.

## 5. Profit sharing ratio and credit control

I had argued in an earlier paper (Hasan 2008) that in principle credit creation (and destruction) by banks is, within confines, an economic imperative for frictionless running and stability of an economy and in principle there presumably is no Shai'ah provision denying Islamic banks to participate in the process. Shamim in his paper under reference (Section 2.2; PP. 237-238) provides a neat summary of the earlier literature on the point for us. He seems to go with the view that the absence of rate of interest from the scene in the Islamic system of finance does not reduce the tools of monetary policy because the profit sharing rates (ratios) can serve as a replacement

In contrast, I had expressed the opinion that profit sharing ratio is apparently not a price for credit like the rate of interest and cannot, therefore, take its place in the central banks' arsenal of credit control. I shall now discuss the implications if attempts were made to use the sharing ratio for the purpose. The exercise has significance because in most countries a *dual* monetary system with mainstream commercial banks operating along with Islamic banks is in operation but it is regulated by a unitary policy

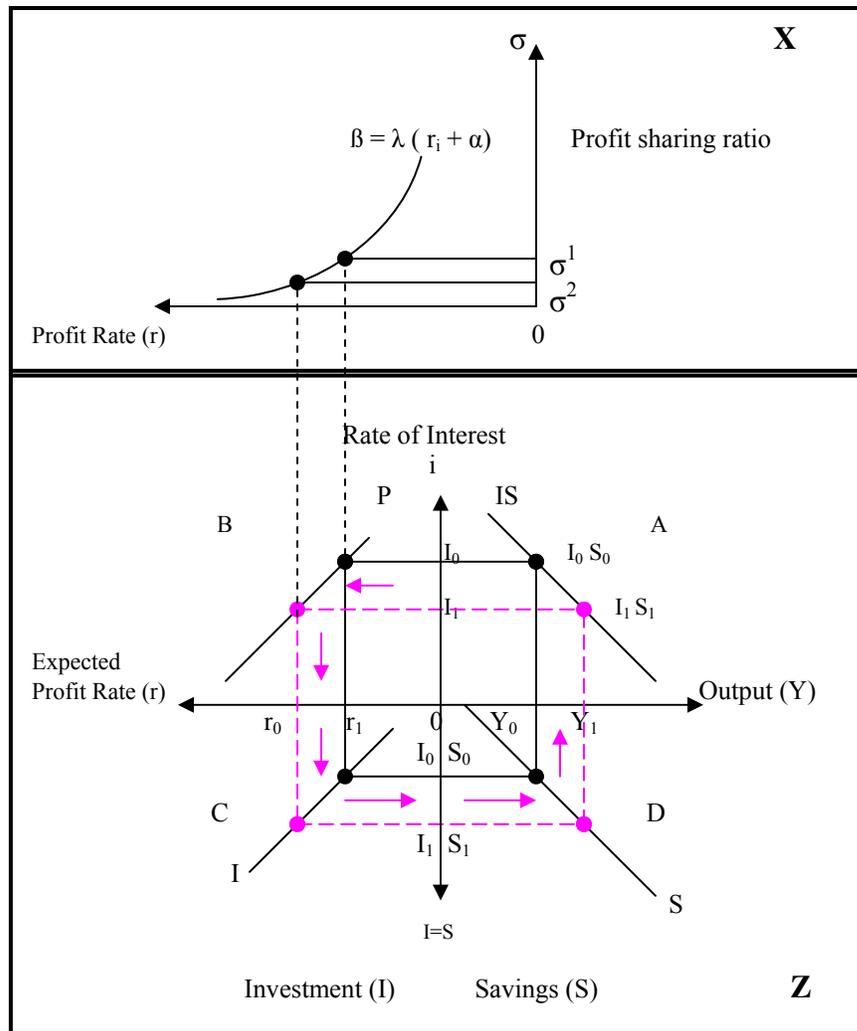
The use of profit sharing ratio as a monetary policy tool raises some ticklish questions. For instance, which of the profit sharing ratios -  $\sigma$  or  $\sigma^*$  - is to be the target variable? Here, the choice is not difficult; monetary policy being a macro level matter  $\sigma$

palpably wins the day. Under mudaraba rules,  $\sigma$  is essentially a matter of *negotiations* between the parties which we know is not the case with the rate of interest. The size of  $\sigma$  could differ from customer to customer within a bank as also between the banks. More complex questions include if in a dual banking system both the bank rate and PSR manipulations will be needed for simultaneous use or in isolation of one another? If used together, could the two be moved in the same direction or will have identical impact? Figure 1 may help answer some such questions. It has two sections X and Z. In section X, we have shown the relationship of profit sharing ratio with expected profit rate, treating  $\beta = \lambda (r_i + \alpha)$  as a constant (Hasan 1985).<sup>17</sup> Section Z relates to mainstream macroeconomic variables and their interrelationships; it is divided into four quadrants A, B, C and D. In A we show the usual inverse relationship between interest rate  $r_i$  and growth in output via the IS curve. Quadrant B sees interest rate in a negative relationship with the expected rate of profit  $r$ . In C we show investment having positive correlation with profit expectations while D relates savings (= I) to growth. The solid line rectangle shows the various variables in a state of stable equilibrium that can be disturbed due to a change in any of them. If monetary policy uses (lowers) rate of interest to bring about the change (to cure recession) a whole process of adjustments is set in motion shown by the direction of arrows along the broken line path until a new equilibrium is established. The readjustment process is very complicated and immediate consequences of any change a monetary policy move may initiate are difficult to predict or control. Figure 1 provides a rather schematic demonstration. The corner points of each rectangle show that interest rates, profit expectations, savings = investment and growth in output can simultaneously have values compatible with one another depicting a harmonious and stable state of macroeconomic equilibrium. However, it does not help specify and explain the *sequence of events or pace of change* as also the implications of happenings during transition from one state of equilibrium to another. However, the figure still provides some useful insights on the issue under discussion

Putting X and Z sections of the Figure together we can venture the opinion that the use of profit sharing ratio for credit control will not be inconsistent with the

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<sup>17</sup> Refer to equation (1) above for ready reference



**Figure 1:** Relationship between Profit (P) and Investment (I) via Interest Rate,  $i$

positive correlation. Thus, even if the central bank uses only the interest rate as a policy tool, the market is likely to readjust  $\sigma$  for new mudaraba contracts to match the altered rate of interest. In a dual financial system like the one operating in Malaysia, this result may be of value and significance; if interest rate applicable to mainstream banks were for instance raised to curb inflation, the profit sharing ratios will appropriately increase and the credit creation activities of Islamic banks, provided they indulge in it, will automatically be curbed.

Even as the principle and relationships are clear enough, a central bank may face many cobwebs to clear as the questions like the ones we raised earlier will have to be answered to ensure the operational effectiveness of the instrument. For example, the constant  $\beta$  may change due to a change in  $r_i$ ,  $\lambda$  and  $\alpha$ , individually or in combination and they may change in the same or opposite directions. It would be difficult to predict such

changes or assess their impact. Thus, the overall impact of a change in  $\sigma$  may be quite hazardous to visualize. For its significance and complexities, this can be a worthwhile area for research in Islamic finance. Presumably, it would be easier and more effective to use  $\mathcal{G}$  as explained above in place of  $\sigma$  as a policy variable.

## 6. Concluding remarks

This paper has shown that the current use of mudaraba contracts in Islamic banking is beset with confusion and ambiguities. Even a cursory look at the prevalent profit sharing schemes, especially on how the ratios are settled and weights assigned to different categories of deposits with reference to amount and time period involved needs scrutiny and control. A Shari'ah issue involved in the matter seems to be this: if a one month deposit were not withdrawn after the expiry of its tenure but is renewed as investment - principal + profit earned - for another month, will such renewal not attract Islamic injunctions against interest? The bankers' response to the query at the INCEIF organized seminar referred to earlier was that the reinvestment of principal plus profit is under a new contract and therefore the question is out of place. However, renewal under interest finance is under a de facto new contract too; renewal requires the consent of the depositor and the rate of interest may be varied.

A study of profit rates the depositors are getting in Islamic banks gives the impression that, but for their commitment to faith; the believers might choose conventional banks if risk factor were taken into consideration. The suggestion is to ensure fairness in the division of profit between the banks and the depositors that seems currently missing in the mixed mudarabah contracts<sup>18</sup>. This paper suggests for consideration a policy variable  $\mathcal{G}$  the maximum enhancement over the rate of return  $r$  the banks get on total investment  $K$ . Moreover, Islamic banks and conventional banks involved in Islamic finance may be required to publish in their periodic financial statements profit rates the banks earn on their equity side by side the rates allowed on

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<sup>18</sup> Some suggested in this context that banks may build return equalization reserves out of profits to smoothen rates differences over time. But what it has to do with the issue of equity. Narrowing differences does not improve the level of rates. Rather it raises the ticklish question of distributive justice between the present and the future generations of depositors

deposits to improve information and transparency. How free are the negotiations between banks and the depositors, especially the smaller ones, may also have to be looked into. The use of standard contract forms that the depositors have no option but to sign looks patently un-Islamic.

Table 1 above suggests that smaller size deposits are presumably attracting less attention of Islamic banks with reference to returns and facilities provided. Should they not differ in this matter from the mainstream banks? Is it possible to empower depositors by organizing them in some sort of councils for collective negotiations on PSRs? Such councils may be organized at the level of individual banks and have an apex body federating them. Possibly, legal basis for such organizational structures can be created and central bank may play a role in the matter?

In view of the current financial crisis - the worst capitalism has faced since 1930 - central banks must somehow put a tab on the lure for leverage gains. Otherwise, the massive bailout exercise now underway in the US<sup>19</sup>, even if successful, will certainly not be the last. This adds weight to our suggestion of employing  $\rho$  as a constraint for manipulating  $\sigma$  in the case of Islamic banks along with the rate of interest for the mainstream institutions to control credit in a dual banking system as the one operating in Malaysia. However, it is a complicated matter involving many imponderables. Much research is needed before making a decision including the changes legal framework dealing with banking would require.

Finally, we stick to our position that profit sharing in a two-tier mudaraba cannot give the same rate of return to depositors as the bank earns on investing their deposits. Abbas and Mirakhor are in error on the point: the two rates will not be equal even if we employ musharakah, as Shamim suggests in their defense, on the asset side of the balance sheet. The rate received by the depositors will invariably be smaller as part of profit earned on investment deposits will, in any case, be retained by the bank for working as an entrepreneur on their behalf.

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<sup>19</sup> The bailout equity purchase of giants in trouble like the AIG went up to 80%. At the European Financial Crisis Summit in Paris on October 4, 2008 called to seek a coordinated response to the deepening credit crunch, the Italian Prime Minister declared: "I want the message to go out from this meeting today: No sound and solvent bank should be allowed to fall because of a lack of liquidity" (TIO, P.22). All this smacks of what we in India call a nationalization program.

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