

MPRA

Munich Personal RePEc Archive

Riba in La-riba contracts:where to turn in Islamic home financing?

Hasan, Zubair

24. October 2011

Online at <http://mpa.ub.uni-muenchen.de/34386/>
MPRA Paper No. 34386, posted 29. October 2011 / 07:18

Riba in La-riba contracts: where to turn in Islamic home financing?

Zubair Hasan

Professor of Economics and finance

INCEIF: the Global University of Islamic Finance, Kuala Lumpur

Abstract

Even as the BBA model has not made a complete exit from Islamic home financing, the musharakah mutanaqisah partnership (MMP) model is fast gaining popularity with the jurists and the bankers alike as a truly interest free alternative. This paper reproduces our earlier evidence that the MMP model is no different from the conventional home financing involving interest. In this context it refers to actual cases from some countries, especially the US, where MMP is gaining ground. We shall reiterate that our Diminishing Balance Model (DBM) in several ways over the MMP..

Key words: Islam; home finance; interest based model; MMP model; DBM.

INTRODUCTION

It is gratifying to note that Muslim countries have of late been turning to the importance shelter has among the basic human needs an Islamic order is obliged to meet for promoting communal peace and cohesion; they are attempting to mitigate the shortfalls in housing. Islamic banks too have launched a number of schemes for home financing. Among them they initially started with the structures based on BBA but are recently shifting fast to *Musharakah Mutanaqisah Partnership* (MMP) models as replacement due to their apparent immunity from interest.

However, I have recently demonstrated that the conventional finance and the MMP are at par with regard to interest and presented a *Diminishing Balance model* or the DBM as an alternative (Hasan; 2011). The model is entirely free from juridical suspicions and has some additional merits as well. The model with some improvements is reproduced below for making this paper self-contained.

My earlier paper referred to above uses a simple illustration with identical details for model comparisons. Put briefly, the illustration assumed that a customer wants to purchase from a seller a house, RM 100,000 being its cash down price. He pays RM 20,000 as earnest money to the seller with a promise to clear the remaining RM80000 within three months. In search of the cheapest terms available for raising this amount (faith not affecting his choice), the customer first approaches a conventional bank with a plan to clear the liability in 10 years, spread over 20 six-monthly installments. The conventional bank offers to meet his requirements at 8% interest a year plus a capital redemption factor of 6.71%; the overall annual rate thus being 14.71%, the six-monthly rate being 7.355%. Each installment at that rate would equal $(80,000 \times 0.07355)$ or

RM 5884. Under the terms the bank offers, the interest payments would stop if at any time before the expiry of the contract, the client clears the outstanding amount in full. The house is to be registered in the name of the customer who would simultaneously mortgage it with the bank as security. The customer now approaches an Islamic bank for cost comparison.

The Islamic bank too agrees to the payment schedule of the customer but shuns interest. It offers him a *Mishawka mutanaqisah participatory* plan, the MMP. The bank and the customer start with a co-ownership of the house to be registered in the name of the customer. They also agree to an annual 8% rental value for the house to be shared in the customer-bank ownership ratio at points in time. Under the plan, the customer would surrender his rent share to the bank for buying away the bank's ownership units in installments. The installments are so designed that the debt is cleared on time giving the bank the stipulated return as well. Thus, the bank would not only receive a share in rent proportionate to its ownership in the house at any point in time but also the part of rental accruing to the customer. Consequently, with each installment payment the bank's share in the house ownership will decrease by the amount of the customer-rental-share surrendered to the bank. That would progressively increase the rental share of the customer and help him reduce the debt at an increasing rate so that it is fully cleared on the due date.

However, as the customer's surrender of his part of the rental to the bank will not be enough to recover the amount in full, a redemption factor of 6.71% would be added to the 8% rental giving an overall six-monthly charge of $14.71 / 2 = 7.355\%$, that is the rent plus redemption rate is halved for a six-monthly payments. This would fix the installment at $80000 \times 0.07355 = \text{RM } 5884$: the same as in the case of the conventional bank. Since the entire rental goes to the bank the return (profit) component in the installment would be $5884 - 4000 = \text{RM } 1884$; It can be viewed as the price of one unit of bank's ownership the customer is obliged to buy each six months the remaining RM 4000 (i.e. $80000/20$) in the installment being the capital repayment component. Table A2 in the Appendix explains the working of the MMP model.

Let us now explain the *Diminishing Balance Model* (DBM) and show its working using our earlier illustration. The bank proposes to the client as follows. You have already paid RM 20000 to the seller as earnest money. The remaining RM 80000 the bank shall pay for acquiring the co-ownership in the house. For getting back the amount in six-monthly installments over a period of ten year, we shall put a yearly mark-up of 8% for our share in the cost of the house. However, the mark-up amount will be reduced proportionate to the return of our money. That

would help reduce your liability to the bank. The registration of the house in the court will be in your name but you will have to sign simultaneously a mortgage deed pledging the property with the bank as security until installments as per Table 1 have all been cleared in full. The Table provides the calculation for your six-monthly installments.

Table 1: Working of the Diminishing Balance Model

Installments	Return of capital	Diminishing balance	Mark-up on C	Installment Payments
A	B	C	D	E = B + D
0	0	80000		
1	4000	76000	3200	7200
2	4000	72000	3040	7040
3	4000	68000	2880	6880
4	4000	64000	2720	6720
5	4000	60000	2560	6560
6	4000	56000	2400	6400
7	4000	52000	2240	6240
8	4000	48000	2080	6080
9	4000	44000	1920	5920
10	4000	40000	1760	5760
11	4000	36000	1600	5600
12	4000	32000	1440	5440
13	4000	28000	1280	5280
14	4000	24000	1120	5120
15	4000	20000	960	4960
16	4000	16000	800	4800
17	4000	12000	640	4640
18	4000	8000	480	4480
19	4000	4000	320	4320
20	4000	0	160	4160
Total	80,000		33,600	11,3600

. The return on capital part is calculated at an agreed annual mark-up of 8% per annum operating on the diminishing balance as return to the bank. Thus, the installment would have a fixed component of capital return amounting $RM\ 4000 = [80000 / 20]$. The return on capital will be calculated on the capital remaining outstanding at the beginning of each six month at $.08 / 2 = 0.04$ or 4%. Note that three separate contracts are involved in completing the sale-payment process under the DBM

1. First is a contract of sale for joint ownership of the house involving three parties: the bank, the customer and the seller. The customer agrees to treat the earnest money as

paid for both the partners. The seller sells the property to the co-ownership of the bank and the customer after the former pays the balance of RM 80,000 to him to acquire an 80% share in the house.

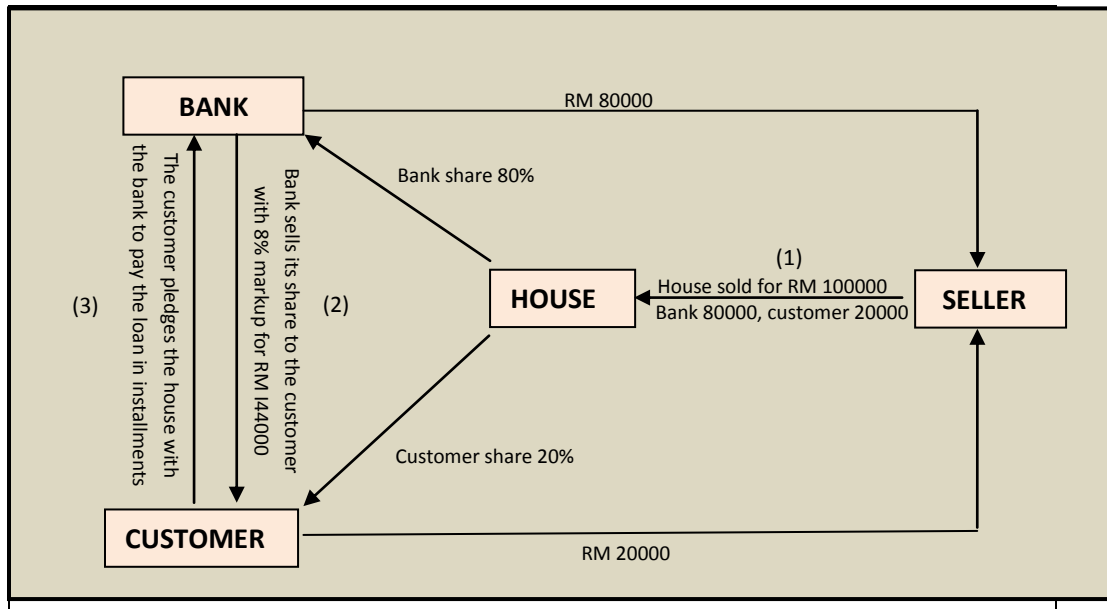


Figure 1: Diminishing Balance Model in operation: Three independent contracts

2. Second is the contract between the customer and the bank, the latter selling his share in the property to him with an agreed mark-up spread at 8% a year on the outstanding amount.
3. Third is the contract whereby the customer mortgages the house with the bank until the payments are all cleared in accordance with the terms of the mortgage.

The three contracts are to be executed simultaneously. The house is to be registered in the name of the customer. Let us now compare the three models placing side by side in Table 2 the amounts the customer would have to pay as return to the bank in each case additional to the capital component in the installments.

The de facto annual rate of return on capital equals 4.73% [$37846 / 80000$] in both the conventional and the MMP structures. However, in *Diminishing Balance Model* or the DBM of our construct this rate reduces to 4.20% [$33600 / 80000$] the customer thus having 0.53% a year as comparative advantage. While the installments in the first two cases are fixed the same vary in the DBM. Table 3 puts the results together. The Appendix at the end provides Tables from which the relevant columns for the remaining models – conventional and the MMP – have been obtained.

Table 2: Returns under each Model

Installment number	Conventional Interest	MMP Rental	DBM Mark-up	Difference MMP – DBM
1	3200	3200	3200	0
2	3093	3093	3040	53
3	2981	2981	2880	101
4	2865	2865	2720	145
5	2744	2744	2560	184
6	2619	2619	2400	219
7	2488	2488	2240	248
8	2352	2352	2080	272
9	2211	2211	1920	291
10	2064	2065	1760	305
11	1911	1912	1600	312
12	1752	1752	1440	312
13	1587	1588	1280	308
14	1416	1415	1120	295
15	1236	1236	960	276
16	1050	1051	800	251
17	857	856	640	216
18	656	656	480	176
19	447	447	320	127
20	229	230	160	70
Sub-total	37757	37757	33,600	4157
Residual*	89	89	00	89
Total	37846	37846	33,600	4246

* The discrepancy of RM 89 arise because of approximations made in the calculation of the values

Table 3: Comparison of competitive house financing models

S. No	Model Description	finance provided	Nature of installment	Residual RM	Profit of financier
1.	Conventional (Interest based)	80%	Uniform	89	4.73%
2.	Musharakah mutanaqisa partnership (MMP)	80%	Uniform	89	4.73%
3.	Diminishing Balance Model (DBM)	80%	Non-uniform	0	4.20%

Today the MMP model for home financing is being used in many Muslim and non-Muslim countries across the globe. It is operating under different names like ‘the declining balance program’ of Zayan Finance, ‘the declining balance co-ownership program’ of Guidance: residential or ‘the diminishing musharkah financing’ of the Meezan. These banks have indulged in heavy advertising of their home financing structures. They claim them to be interest-free and quote world renowned Islamic jurists on their advisory boards in support to attract business.

We take as an illustration the celebrated American Finance House; its Islamic arm the LARIBA. Its “Lease to Purchase model” or LTP is typical of the MMP deployment in home financing. To explain the LTP application process AFH takes the cost of home as \$150,000. The client pays \$30,000 as down payment while the remaining \$120,000 is provided by the LARIBA. The property is purchased jointly by the parties. The deferred payment is to be cleared over 15 years in 180 monthly installments. The rent of the house is agreed to be \$1000 per month. Table 4 presents part of the amortization particulars as the AFH depicts in Table 1 of their document.

LARIBA claim their model being “free of interest” even as they explicitly admit that the transaction involves an implicit interest rate (p.3)¹. What this rate is they do not indicate in the document. However, it is not difficult to find its magnitude from the data they provide in their Table 1 reproduced below as Table 4.

Table 4: Showing an excerpt of amortization scheme

Month	Return on capital	Return of capital	Payments	Balance
Beginning	---	---	---	\$120,000
1	\$800	\$347	\$1147	\$119653
2	\$789	\$349	\$1147	\$119304
---	---	---	---	---
180	\$7	\$1140	\$1147	\$0

The rental being \$1000 a month, the annual return on \$150,000 will be 8% (interestingly, the same as in our example). Now, if we assume the capital redemption factor added to this rental as B, we have:

$$\begin{aligned}
 (0.08 + B) 120,000 &= 1147 \times 12 && (\$1147 \text{ is the monthly installment}) \dots \dots (1) \\
 \text{This yields } 9600 + 120,000B &= 13764 \dots \dots \dots (2) \\
 \text{Therefore, } B &= [13764 - 9600] / 120,000 = 0.0347 \text{ or } 3.47 \% \dots \dots \dots (3)
 \end{aligned}$$

Thus, 3.47% is what the AFH document refers to as the imputed or implied interest we noted above. It is easy to verify the result. Putting $B = .0347$ in equation (1) we get the monthly installment = \$1147, the same as in Table 3. *Thus, there is riba in the home financing program of LARIBA.* Still, the AFH claims and extensively publishes the world over that their model is at once Shari’ah compliant! They nicely rap up interest in a rather foxy language as to how the return on capital is determined. Conventional banks straight away tell the customer that the quoted interest rate is not sufficient to fix the installment amount that would redeem his liability to the bank on the stipulated date the relevant PV unless we add an appropriate redemption factor². But the LARIBA document states that the *total* monthly charge containing return of

¹ This disclosure had to be made in compliance with the requirements of the financial law in the US.

² In fact conventional banks add an appropriate redemption factor to the interest rate to ensure that the discounted income stream that installment payments generate equals to the present value (PV) of the loan. The jurists have to clarify the reason of allowing it in the MMP contracts as it imparts an interest element to the agreed upon rental rate

capital plus the return on it is a fixed amount its level depending on the payment plan data – the agreed rental, number of installments and the initial contribution of the parties to acquire joint ownership of the house. The implicit addition of a interest factor is not mentioned. This all is happening even as AFH has the cream of world jurists at their advisory let by Sheikh Taqi Usmani who append their signatures to the document. Possibly the learned Jurists could not look into the mathematics of the model. The addition of what is called the redemption factor to the interest/rental rates in the models has the advantage of keeping the installment uniform over the contract period which may have some psychological value for the customer. But let the bank explain to him that installment payment in the DBM will be known to him from the schedule attached to the contract and see if he will still like to go for the costlier MMP which in addition has an implicit interest element.³

Yavar in his comment on DBM posted on the INCEIF Blog sought an interesting and important clarification. He asked whether bank in its negotiations with the customer on the issue of rental would go for a relatively higher rate or seek a lower one. To provide an answer, we constructed a case using two more rental rates 10% and 6% placed on either side of the initial 8% in my model. We also made a simplifying assumption that the customer himself lives in the house. The rental negotiation is just for accounting purposes; no money flows are involved. Table 5 below helps draw the conclusion. Row D of the Table shows that higher is the rental larger is the proportion of the total rent accruing to the bank. This means that the bank would

TABLE 5: VARYING RENTAL RATES AND THEIR IMPACT (AMOUNT IN RM)

RENTAL RATES ON RM	10%	8%	6%	LABELS
TOTAL RENT (10 YEARS)	100,000	80000	60000	A = B + C
RENTAL FOR CUSTOMER	38600	42243	33120	B
RENTAL FOR THE BANK	61400	37680	26880	C
C//A	61.4%	47.1%	44.8	D

³ We find that if monthly installments are converted into yearly payments for the ease of calculation, DBM would be cheaper by 0.54% per annum, almost the same as in our example.

receive more of *cash in the installments*. Thus, the bank would presumably be interested in a lower rental rate in the agreement. The actual position would be settled by the market rental rate if the house is lent out; there would be little to negotiate. The DBM avoids all complications related to the rentals or of property valuations Meera and Razak are found struggling with in the case of MMP.

APPENDIX

Table A1: Working of the conventional bank Model

Serial No.	Installments	Interest	Principal	Balance
0	--	---	---	--
1	5884	3200	2684	77316
2	5884	3093	2791	74525
3	5884	2981	2903	71622
4	5884	2865	3019	68603
5	5884	2744	3140	65463
6	5884	2419	3265	62198
7	5884	2488	3396	58802
8	5884	3352	3512	55270
9	5884	2211	3673	51597
10	5884	2064	3820	47777
11	5884	1911	3973	43804
12	5884	1752	4132	39672
13	5884	1587	4297	35375
14	5884	1415	4469	30906
15	5884	1236	4648	26258
16	5884	1050	4834	21424
17	5884	657	5057	16397
18	5884	656	5228	11168
19	5884	447	5437	5730
20	5884	229	5655	89
Total	117680	37757	79923	

Table A2: Working of the MMP Model

Installment No.	Rental Division (RM)		Equity (RM)	
	Customer	Bank	Customer	Bank
0			20000.0	80000.0
1	800.0	3200.0	22684.0	77316.0
2	907.4	3092.6	25475.4	74524.6
3	1019.0	2981.0	28370.4	71629.6
4	1134.8	2865.2	31389.2	68610.8
5	1255.6	2744.4	34528.8	65471.2
6	1381.1	2618.9	37793.9	62206.1
7	1511.8	2488.2	41189.7	58810.3
8	1647.6	2352.4	44721.3	55278.7
9	1780.8	2211.2	48386.1	51613.9
10	1935.4	2064.6	52205.5	47794.5
11	2086.2	1911.8	56175.7	43624.3
12	2247.0	1753.0	60306.7	39693.3
13	2412.0	1588.0	64602.7	35397.3
14	2584.1	1415.9	69070.8	30929.2
15	2762.8	1237.2	73717.6	26282.4
16	2948.7	1051.3	78565.3	21449.7
17	3142.6	857.4	83591.9	16408.1
18	3343.7	656.3	88819.6	11180.4
19	3552.8	447.2	94256.4	5743.6
20	3770.2	229.8	99910.6	89.4
Total	42243	37757		

CONCLUDING REMARKS

This paper reinforces the argument of my earlier writings that the MMP model is no different in its consequences for the participants in Islamic home finance. The amortization processes these contracts use interest rates invariably contain a compounding “add on”, element, something much more severely condemned in the Qur’an. How Islamic jurists could stamp such agreements as Shari’ah compliant just beats me. More surprising is the attitude of neglect the bankers have

so far shown to my at once Shari'ah abiding and cheaper *Diminishing Balance model* the DBM. Once the underlying principle and procedures of this model are accepted, Islamic finance modes are likely to change in a radical way and gain a competitive edge over conventional finance in almost every sphere of financing practices. Allah knows the best.

ACKNOWLEDGEMENTS

The author expresses his deep gratitude to all those who sent in their comments on the earlier versions of this paper. Among them, I would like to mention the names of the former and the current PCEOs of INCEIF Mr. Agil Natt and Mr. Daud Vicary Abdullah respectively, both counted among the leading lights of the banking industry at the global level. Mr. Daud wrote about the Diminishing Balance Model or the DBM for Islamic home financing on the INCEIF Blog - *Diamonds in the cupboard* - on August 22, 2011 as follows

As a former practitioner I found the content not only fascinating, but also the relevance of the DBM structure for reducing the cost of Home Financing to the customer. I would strongly recommend that my colleagues in the profession and Islamic Finance customers alike to take a look at this innovative product and see how it can be implemented for the benefit of all as soon as possible.

References

American Finance House – LARIBA: Financing alternative to the conventional 'Riba' system, Lariba.com Home Financing – Accessed on 24.10.2011.

Guidance Financial group White paper series number 1: The declining balance co-ownership program – Accessed on 24.10.2011

Guidance: residential Shari'ah Compliant Finance v. Conventional Finance www.Guidance residential.com – Accessed on 24.10.11

Hasan Zubair (2011): *Islamic home finance in the social mirror*, ISRA: International Journal of Islamic Finance, Vol. 3, No.1 June

Meera, A. K. M & Razak, D. A (2009): *Home financing through the musharakah mutanaqisah contracts: some practical issues*, JKAU: Islamic Economics, Vol. 22, No.1, pp. 3-25.

Meezan Bank Easy Home works on a Diminishing Musharakah basis – Accessed on 24.10.2011

Zayan Finance: The declining balance program - integrity in financing; Shari'ah Compliance Information. www.zayanfinance.com/ii-shariah-compliance.php - Accessed on 24.10.2011