

ORIGINAL ARTICLES

Implementation of Integration Model for All

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ABSTRACT

Everyone knows that there are various names used in the takaful or insurance business, but does anyone know about the transparency in customer quotations if they do not hide the important data or 'inner works'. This is important for customers to make the right selection when buying insurance or takaful products. Therefore, a new design of premium life tables and also the implementation of the model should be made because to satisfy the customer and free of hidden agenda.

Key words: Mudharabah model, Wakala model, riders, life insurance model and Premium Life Table.

Introduction

The widely differing attitudes of Muslim scholars on the validity of insurance can be grouped under three broad categories taken from Siddiqi (1980).

1. those (including Shia jurists) that see nothing wrong in the basic principles underlying modern insurance. Not with standing ignorance (jahl) and uncertainty (gharar) provided it is free from riba (usury, interest) by Amin (1985).
2. those who find an element of gambling in all kinds of insurance, coupled with riba (interest) and gharar (uncertainty) and regard it as an unnecessary innovation;
3. those that approve general insurance but disapprove life-insurance as it involves gambling and gharar (uncertainty and pre-destination).

Some others appear to be inclined towards mutual insurance, or the insurance directly transacted by the State (Muslehuddin, 1982). The exploitative element in commercial insurance makes it unacceptable to some of the scholars (Zarqa, 1962):

In view of the fact that the objections of Muslims against insurance in its present form are very well-known, it is proposed to examine this issue very briefly. The Fatwa Committee in Malaysia declared in 1972 that the life insurance as practiced in the country was unlawful as it had the element of riba, gharar and maisir (Report Committee, 1984). Similarly, the First International Conference (1976) on Islamic Economics held at Makkah (Saudi Arabia) resolved that:

"Commercial insurance as presently practiced does not satisfy the Islamic conditions for it to become acceptable".

Thus, what are unacceptable to Muslims is the insurance "as presently practiced" and not the idea of insurance as such. A scanning of the existing literature brings out certain major objections against insurance (Nik Ramlah, 1991).

The Existing Models in Family Takaful and Life Insurance:

Mudharabah Model:

The premium life table of Mudharabah model in education plan takaful of the Existing model had shown in the Table 1 as below.

Derivation of General Formulation in Mudharabah Model:

The general formula from a particular client quotation uses the derivation method by using the data in the Table 2. Therefore, the general formulation in Mudharabah Existing model is given as below (Puspa et. al., 2011a).

Table 1: Client Quotation of Mudharabah Existing Model.

Child Age	Money outlay	Insured Account (P _i)	Special Account	Profit	Total	Child Death	Insured Death
4	600	544	56	27	571	1571	8800
5	1200	1088	112	83	1171	2171	8200
6	1800	1633	167	169	1801	2801	7600
7	2400	2177	223	386	2463	3463	7000
8	3000	2721	279	436	3157	4157	6400
9	3600	3265	335	621	3887	4887	5800
10	4200	3809	391	843	4652	5652	5200
11	4800	4354	446	1103	5456	6456	4600
12	5400	4898	502	1403	6301	7301	4000
13	6000	5442	558	1745	7187	8187	3400
14	6600	5986	614	2132	8118	9118	2800
15	7200	6530	670	2565	9095	10095	2200
16	7800	7075	725	3047	10121	11121	1600
17	8400	7619	781	3580	11199	12199	1000

Table 2: General Formulation of Mudharabah Existing Model.

Year <i>i</i>	Insured Account <i>P_i</i>	Total of the Insured Account <i>Q_i</i>	Profit of the Total Insured Account <i>Q_ir</i>	Total Profit Per Year <i>T_i</i>	Child Death <i>T_i + 1000</i>	Insured Death <i>D_i</i>
<i>i</i>	<i>P_i</i>	<i>Q_i</i>	$Q_i = P_i + \sum_{j=1}^{i-1} T_{i-j}$ $(i = 2,3,...,14;$ $Q_i = P_i)$	$T_i = P_i + Q_i r$ $(i = 1,2,3,...,14)$	$C_i = T_i + 1000$ $(i = 1,2,3,...,14)$	$D_i = D_{i-1} - 600$ $(i = 2,3,...,14;$ $D_1 = 8800)$

The generalization for year n in profit of the total insured account is shown as below.

$$P_n(1+r) + P_{n-1}r(1+r) + \dots + P_3r(1+r)^{n-3} + P_2r(1+r)^{n-2} + P_1r(1+r)^{n-1}$$

The premium life table shows that premium covers the participant and a child in the death coverage and death benefit. The weakness of this model, it is does not cover other riders such as health, accident, hospital costs, loss of effort to work, critical illnesses, education and also pension (Puspa, 2010).

Based on the client quotation of a family takaful as shown in Table.1, the table has detailed information. The total payment for 14 years is RM8 400.The participant can earn RM11 199 for his child’s education with the management fee of RM150. Therefore, the net maturity value is RM11 199 – RM150 which comes to RM11 049.(Puspa et. al., 2011a)

If the child dies after 8 years of being insured, the participant will earn the surrender value (included death coverage) of his child of RM6 456. But if the participant dies after 8 years of being insured, the child will earn RM4 600 for insured death and he will also earn the death benefit for the premium payment until he can earn the maturity value of RM11 199.

The most significant weakness in this model is obtained by the insured child's death when a participant dies is less even though the premiums approaching maturity. The child should get more for the insured death because a participant pay premiums and investment approaches the maximum limit of the old habits that earn more.

Wakala Model:

Premium life table used Wakala Existing model in education plan takaful formulation had shown in the Table 3 as below.

The general formula from a particular client quotation uses the derivation method by using the data in the Table 4. Therefore, the general formulation in Mudharabah Existing model is given as below (Ghazali et. al., 2011a).

Where M is a total monthly payment in a year, I is a percentage of personal account in decimal, Cn-1 is cumulative profit of personal account before n year, and r is a interest rate in a year.

Based on the client quotation of a family takaful as shown in Table 3, we find that the table has detailed information. We see that the total payment for 16 years is RM28 800. But the participant can earn RM28 351 for his child’s education. Management fees not includes in this model because it already has Wakala fees. From the

table, we found that in Wakala model, the participants needed to pay more premiums because Wakala fees have to pay every month.

Table 3: Table of Illustration Plan.

Number of Year	Monthly Payment in a Year M	Cumulative Payment Outlay	Cumulative Profit of Personal Account C _n	Basic Death Coverage Y	Total Death Coverage T
1	1 800	1 800	0	141 000	141 000
2	1 800	3 600	190	141 000	141 190
3	1 800	5 400	1 150	141 000	142 150
4	1 800	7 200	2 637	141 000	143 637
5	1 800	9 000	4 207	141 000	145 207
6	1 800	10 800	5 862	141 000	146 862
7	1 800	12 600	7 609	141 000	148 609
8	1 800	14 400	9 452	141 000	150 452
9	1 800	16 200	11 396	141 000	152 396
10	1 800	18 000	13 447	141 000	154 447
11	1 800	19 800	15 611	141 000	156 611
12	1 800	21 600	17 894	141 000	158 894
13	1 800	23 400	20 302	141 000	161 302
14	1 800	25 200	22 843	141 000	163 843
15	1 800	27 000	25 523	141 000	166 523
16	1 800	28800	28 351	141 000	169 351

Table 4: General Formulation of Wakala Existing Model.

Number of Year	Total Monthly Payment In a Year	Cumulative Payment Outlay	Cumulative Profit of Personal Account	Total Death Coverage
t	M_n	$\sum_{i=1}^n M_i$	$C_n = (M_n I + C_{n-1})(1 + r)$	$Y + C_n$

The weakness of this model is the investment to fund children's education, but if the child dies then the participants will be rewarded with a turnover higher than at maturity. This show seems like the child died in the takaful business. If the participant dies, a child should be rewarded more because to survive in the future.

Premium Life Table of Life Insurance:

The data of particular client proposal in the Table 5 shows the premium payment in monthly mode (Ghazali and Mohd, 2011b).

Table 5: Client Proposal of Particular Life Insurance.

Number	Items	Value
1.	Basic	RM18000
2.	Female	42 year old non smoker
3.	Period	20 years
4.	Premium	RM125.65 (Monthly)
5.	Value after maturity	RM29 802 (Monthly)
6.	Interest Rate	5.738 per year

Significant weakness of this model is the client's proposal cannot provide complete data to the client if there is a case of early surrender before maturity. This data is not shown to customers as well as with the death coverage if the child died before maturity. From the client's proposal in the Table 5, then the table can be built with a variety of clients quotation and one of these assumptions are as shown below.

Basic insured = RM18 000

Premium monthly payment = RM125.65

The interest rate and finally the surrender value can be defined as in the Table 6.

$$FV = PV(1+i)^n$$

where PV is the present value, FV is the future value, i is the interest rate in a year and n is the total for year.

So the interest $(1+i)^{20}$ can be calculated as below.

$$FV = PV(1+i)^n$$

$$29\,802 = 1\,507.8(1+i)^{20}$$

$$(1+i)^{20} = \frac{29\,802}{1\,507.8}$$

$$i = 0.1609$$

Therefore the interest rate, $i = 0.1609$

Table 6: Calculation of the Surrender Value in Monthly Mode of Payment.

Number of year	Calculation	The surrender value
1	No profit because of fees payment	0
2	No profit because of fees payment	0
3	$FV = (1.1609)^3 (1\,507.8) = 2\,539$	2 359
4	$FV = (1.1609)^4 (1\,507.8) = 2\,739$	2 739
5	$FV = (1.1609)^5 (1\,507.8) = 3\,179$	3 179
6	$FV = (1.1609)^6 (1\,507.8) = 3\,691$	3 691
7	$FV = (1.1609)^7 (1\,507.8) = 4\,285$	4 285
8	$FV = (1.1609)^8 (1\,507.8) = 4\,974$	4 974
9	$FV = (1.1609)^9 (1\,507.8) = 5\,774$	5 774
10	$FV = (1.1609)^{10} (1\,507.8) = 6\,703$	6 703
11	$FV = (1.1609)^{11} (1\,507.8) = 7\,782$	7 782
12	$FV = (1.1609)^{12} (1\,507.8) = 9\,034$	9 034
13	$FV = (1.1609)^{13} (1\,507.8) = 10\,488$	10 488
14	$FV = (1.1609)^{14} (1\,507.8) = 12\,175$	12 175
15	$FV = (1.1609)^{15} (1\,507.8) = 14\,134$	14 134
16	$FV = (1.1609)^{16} (1\,507.8) = 16\,408$	16 408
17	$FV = (1.1609)^{17} (1\,507.8) = 19\,049$	19 049
18	$FV = (1.1609)^{18} (1\,507.8) = 22\,113$	22 113
19	$FV = (1.1609)^{19} (1\,507.8) = 25\,672$	25 672
20	$FV = (1.1609)^{20} (1\,507.8) = 29\,802$	29 802

After we find the surrender value in the Table 6, we can construct the detail client quotation as Table 7. (Puspa and Ismail, 2011).

Table 7: Client Quotation in Monthly Mode of Payment.

Year	Age	Premium (RM)	Payment Layout (RM)	Surrender Value (RM)	Death Coverage (RM)
1	5	125.65	1 507.80	0	18 000
2	6	125.65	3 015.60	0	18 000
3	7	125.65	4 523.40	2 359	20 359
4	8	125.65	6 031.20	2 739	20 739
5	9	125.65	7 539.00	3 179	21 179
6	10	125.65	9 046.80	3 691	21 691
7	11	125.65	10 544.60	4 285	22 285
8	12	125.65	12 062.40	4 974	22 974
9	13	125.65	13 570.20	5 774	23 774
10	14	125.65	15 078.00	6 703	24 703
11	15	125.65	16 585.80	7 782	25 785
12	16	125.65	18 093.60	9 034	27 034
13	17	125.65	19 601.40	10 488	28 488
14	18	125.65	21 109.20	12 175	30 175
15	19	125.65	22 617.00	14 134	32 134
16	20	125.65	24 124.80	16 408	34 408
17	21	125.65	25 632.60	19 049	37 049
18	22	125.65	27 140.40	22 113	40 113
19	23	125.65	28 648.20	25 672	43 672
20	24	125.65	30 156.00	29 802	47 802

Methodology:

From existing models such as above, either in the takaful or insurance business there is many disadvantages and should be changed to be more flexible model. Everybody needs a new model of Islamic insurance (Integration Model) which can covers mostly of their risks and the premium life table must give the transparence data of client quotation without elements of riba, gharar and maisir . In this method, clients proposal need to add more riders as shown in Table 8.

Table 8: Client Proposal.

NUMBERS	THINGS	VALUES
1	Monthly payment	RMY
2	Female non smoker	K year old
3	Period Term	N year
4	Interest Rate	R per year
5	Monthly saving	RMp
6	Tabarru Account	RMj
7	Surrender Values	RMt
8	Death Coverage	RM10x
9	Khiarat	RM2x
10	Loss An Effort To Work/ 40 critical illnesses	RM10x
11	Hospital Bills	RM5x
12	Pension	0.3x

From Table 8, the client proposal need many riders such as death coverage, death benefit, khiarat, loss of effort to work or 40 critical illnesses, hospital bills and pension. After a discussion with many Muslim, the researcher realises that they need a detailed client premium life table to avoid uncertainty in their business as shown in Table 8 (Puspa, 2010).

Let Q_1 is the year, Q_2 is the age, Q_3 is the layout payment, Q_4 is the tabarru account, Q_5 is the personal account, Q_6 is the surrender value, Q_7 is the khiarat, Q_8 is the loss an effort to work or 40 critical illnesses, Q_9 is the death coverage, Q_{10} is the hospital bills, Q_{11} is the pension and Q_{12} is the death benefit. (Ghazali et.al., 2011a)

Table 9: Client Quotation for $i= 1,2,3,\dots,17$ (Mudharabah Model).

Q_1	Q_2	Q_3	Q_4	Q_5	Q_6	Q_7	Q_8	Q_9	Q_{10}	Q_{11}	Q_{12}
n_i	k_i	12iy	$i(12y - w)$	p_i	t_i	$2x$	10x	10x	5x	0.3x	

The Table 9 is used for mudharabah model because the wakala fee is not includes in the above table.

Table 10: Client Quotation for $i= 1,2,3,\dots,17$ (Wakala Model).

Q_1	Q_2	Q_3	Q_4	Q_5	Q_6	Q_7	Q_8	Q_9	Q_{10}	Q_{11}	Q_{12}	Q_{13}
r_i	k_i	12iy	$i(12y - w)$	p_i	t_i	$2x$	10x	10x	5x	0.3x		

Table 10 is used for Wakala model because it has the Wakala fee as shown in Q_{13} .

From Table 9 and Table10, the value of Q_7 to Q_{11} are in ratio items where if the value of x is RM1 000, so the value of hospital bills is RM5 000.

Build the questionnaire according to the mathematical life table for findings the acceptance of Integration model. There are 10 items in the questionnaire but only 6 items as in Table 11 are used in the research for analyzing the data. The 6 items are used to analyze the frequency and correlation. All the respondents must be employed and 410 respondents are interviewed in the research to answer the questionnaire. (Ghazali et.al, 2012)

Table 11: Items in Questionnaire.

Numbers	Questions
1.	Level of education
2.	Salary per month
3.	The new education plan takaful cost only RM50 and this covers the participant and a child, also the raiders lose an effort to work, critical illnesses, death coverage, hospital bills, death benefit and pension. Can you afford to buy at least one unit of education plan takaful?
4.	How many units of the education plan takaful will you buy based on your salary?
5.	Do you agree that the education plan takaful has all the risk above (question 3) covered?
6.	Do you think this is the best package for education plan takaful and are affordable by all categories income earners?

Numerical Result:

In numerical result, the researcher wants to construct the integration model of premium life tables which are according to the basic models in family takaful (Mudharabah and Wakala).

Mudharabah Model of Integration Model:

Premium life table uses Mudharabah model in education plan takaful of Integration model had shown as below.

Monthly payment = RM50 (1 unit)

Term = 17 years

Interest Rate = 5 % per year (i)

Tabarru` Account = RM 20

Saving Account = RM30

Below are the symbols of elements in mudharabah model where the static premium of life table (Q3, Q4 and Q5) and static benefit (Q6 to Q13) shown in the Table (Ghazali et.al., 2012).

1. Q1 is year
2. Q2 is age
3. Q3 is layout payment
4. Q4 is tabarru account
5. Q5 is personal account
6. Q6 is monthly profit
7. Q7 is yearly profit
8. Q8 is total surrender value
9. Q9 is khiarat
10. Q10 is loss an effort to work or 40 critical illnesses
11. Q11 is death coverage
12. Q12 is hospital bills
13. Q13 is pension
14. Q14 is death benefit

Table 12: Client Quotation of Mudharabah Integration Model.

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
1	1	600	240	360 (P ₁)	8	18	386 (T ₁)	2000	10000	10000	5000	300	
2	2	1200	480	720 (P ₂)	57	36	813 (T ₂)	2000	10000	10000	5000	300	
3	3	1800	720	1080 (P ₃)	110	54	1244 (T ₃)	2000	10000	10000	5000	300	
4	4	2400	960	1440 (P ₄)	164	72	1676 (T ₄)	2000	10000	10000	5000	300	
5	5	3000	1200	1800 (P ₅)	218	90	2108 (T ₅)	2000	10000	10000	5000	300	
6	6	3600	1440	2160 (P ₆)	272	108	2540 (T ₆)	2000	10000	10000	5000	300	
7	7	4200	1680	2520 (P ₇)	326	126	2972 (T ₇)	2000	10000	10000	5000	300	
8	8	4800	1920	2880 (P ₈)	380	144	3404 (T ₈)	2000	10000	10000	5000	300	
9	9	5400	2160	3240 (P ₉)	434	162	3836 (T ₉)	2000	10000	10000	5000	300	
10	10	6000	2400	3600 (P ₁₀)	488	180	4286 (T ₁₀)	2000	10000	10000	5000	300	
11	11	6600	2640	3960 (P ₁₁)	542	198	4700 (T ₁₁)	2000	10000	10000	5000	300	
12	12	7200	2880	4320 (P ₁₂)	596	216	5132 (T ₁₂)	2000	10000	10000	5000	300	
13	13	7800	3120	4680 (P ₁₃)	650	234	5564 (T ₁₃)	2000	10000	10000	5000	300	
14	14	8400	3360	5040 (P ₁₄)	704	252	5996 (T ₁₄)	2000	10000	10000	5000	300	
15	15	9000	3600	5400 (P ₁₅)	756	270	6426 (T ₁₅)	2000	10000	10000	5000	300	
16	16	9600	3840	5740 (P ₁₆)	812	288	6840 (T ₁₆)	2000	10000	10000	5000	300	
17	17	10200	4080	6120 (P ₁₇)	863	306	7289 (T ₁₇)	2000	10000	10000	5000	300	

The derivation of Q6 to Q8 in the Table 12 had shown as below.

1. $.360 + (30 * 5/100 * (66 + 0)) * 1/12 + (360 * 5/100) = 360 + 8 + 18 = 386$
2. $720 + (30 * 5/100 * (66 + 386)) + (720 * 5/100) = 720 + 57 + 36 = 813$

3. $1080 + (30 * 5/100 * (66 + 813)) + (1080 * 5/100) = 1080 + 110 + 54 = 1244$
4. $1440 + (30 * 5/100 * (66 + 1244)) + (1440 * 5/100) = 1440 + 164 + 72 = 1676$
5. $1800 + (30 * 5/100 * (66 + 1676)) + (1800 * 5/100) = 1800 + 218 + 90 = 2108$

$$P_n + (P * i/100 * (66 + T_{n-1})) + (P_n * 5/100) \text{ where } n = 1, 2, 3, 4, 5, \dots$$

$$= P_n(1 + 0.05) + \left(\frac{Pi}{100}\right)\left(\frac{66 + T_{n-1}}{12}\right) \text{ where } P \text{ is the personal account, and } n = 1, 2, 3, \dots$$

The general formula of Table 12 shown in the Table 13 given as follows (Ghazali et.al., 2012)

Table 13: General Formula of Mudharabah Integration Model.

Symbols of elements	Q3	Q4	Q5	Q6 To Q8	Q9	Q10	Q11	Q12	Q13
Formula of elements	600n	0.4(600n)	0.6(600n)	$P_n(1 + 0.05) + \left(\frac{Pi}{100}\right)\left(\frac{66 + T_{n-1}}{12}\right)$ where P is the personal account, and $n = 1, 2, 3, \dots$	2x	10x	10x	5x	0.3x

The premium life table shows that premium covers a child in the death coverage and pension for the participant. This model covers other riders such as health, accident, hospital costs, loss of effort to work, critical illnesses, education and also pension (Puspa, 2010).

Based on the client quotation of a family takaful as shown in Table 11, we find that the table has detailed information. We see that the total payment for 17 years is RM10 200. The participant can earn RM7 289 for his child's education with the management fee of RM150. Therefore, the net maturity value is RM7289 – RM150 which comes to RM7 139. If the participant insures for 3 units so the maturity value is RM21 417. The riders are also multiplies by 3. So the death coverage for a participant is RM30 000 if the child dies and there is a pension of RM900 for the child if the participant dies (Ghazali et.al., 2011b)

Wakala Model of Integration Model:

Premium life table uses Wakala model in education plan takaful of Integration model had shown as below.

Monthly Payment = RM50 (1 unit)

Term = 17 years

Interest Rate = 5 % per year (i)

Below are the symbols of elements in Wakala model where the static premium of life table (Q3 to Q6) and static benefit (Q7 to Q14) shown in the Table 13 (Ghazali et.al., 2012).

- Q1 is year
- Q2 is age
- Q3 is layout payment
- Q4 is tabarru account
- Q5 is wakala fees
- Q6 is personal account
- Q7 is monthly profit
- Q8 is yearly profit
- Q9 is total surrender value
- Q10 is khiarat
- Q11 is loss an effort to work or 40 critical illnesses
- Q12 is death coverage
- Q13 is hospital bills
- Q14 is pension
- Q15 is death benefit

Table 14: Client Quotation of Wakala Integration Model.

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
1	1	600	240	60	(P ₁) 300	7	15	(P ₁) 322	2000	10000	10000	5000	300	
2	2	1200	480	120	(P ₂) 600	40	30	(P ₂) 670	2000	10000	10000	5000	300	
3	3	1800	720	180	(P ₃) 900	77	45	(P ₃) 1022	2000	10000	10000	5000	300	
4	4	2400	960	240	(P ₄) 1200	113	60	(P ₄) 1373	2000	10000	10000	5000	300	
5	5	3000	1200	300	(P ₅) 1500	150	75	(P ₅) 1725	2000	10000	10000	5000	300	
6	6	3600	1440	360	(P ₆) 1800	187	90	(P ₆) 2077	2000	10000	10000	5000	300	
7	7	4200	1680	420	(P ₇) 2100	223	105	(P ₇) 2428	2000	10000	10000	5000	300	
8	8	4800	1920	480	(P ₈) 2400	260	120	(P ₈) 2780	2000	10000	10000	5000	300	
9	9	5400	2160	540	(P ₉) 2700	296	135	(P ₉) 3131	2000	10000	10000	5000	300	
10	10	6000	2400	600	(P ₁₀) 3000	333	150	(P ₁₀) 3483	2000	10000	10000	5000	300	
11	11	6600	2640	660	(P ₁₁) 3300	370	165	(P ₁₁) 3835	2000	10000	10000	5000	300	
12	12	7200	2880	720	(P ₁₂) 3600	406	180	(P ₁₂) 4186	2000	10000	10000	5000	300	
13	13	7800	3120	780	(P ₁₃) 3900	443	195	(P ₁₃) 4538	2000	10000	10000	5000	300	
14	14	8400	3360	840	(P ₁₄) 4200	480	210	(P ₁₄) 4890	2000	10000	10000	5000	300	
15	15	9000	3600	900	(P ₁₅) 4500	516	225	(P ₁₅) 5241	2000	10000	10000	5000	300	
16	16	9600	3840	960	(P ₁₆) 4800	553	240	(P ₁₆) 5593	2000	10000	10000	5000	300	
17	17	10200	4080	1020	(P ₁₇) 5100	589	255	(P ₁₇) 5944	2000	10000	10000	5000	300	

The derivation of Q7 to Q9 in the Table 14 had shown as below.

1. $300 + (25 * 5/100 * (66 + 0)) + (300 * 5/100) = 300 + 7 + 15 = 322$
2. $600 + (25 * 5/100 * (66 + 322)) + (600 * 5/100) = 600 + 40 + 30 = 670$
3. $900 + (25 * 5/100 * (66 + 670)) + (900 * 5/100) = 900 + 77 + 45 = 1022$
4. $1200 + (25 * 5/100 * (66 + 1022)) + (1200 * 5/100) = 1200 + 113 + 60 = 1373$
5. $1500 + (25 * 5/100 * (66 + 1373)) + (1500 * 5/100) = 1500 + 150 + 75 = 1725$

$$P_n + [P * i/100 * (66 + T_{n-1})] + (P_n * 5/100) \text{ where } n = 1, 2, 3, 4, 5, \dots$$

$$= P_n(1 + 0.05) + \left(\frac{Pi}{100}\right)\left(\frac{66 + T_{n-1}}{12}\right) \text{ where } P \text{ is the personal account, and } n=1,2,3,\dots$$

The general formula of Table 14 had shown in the Table 15 given as follows. (Ghazali et.al., 2012)

Table 15: General Formula of Wakala Integration Model.

Symbols of elements	Q3	Q4	Q5	Q6	Q7 to Q9	Q10	Q11	Q12	Q13	Q14
Formula of elements	600n	0.4n. (600n)	0.1n. (600n)	0.5n. (600n)	$P_n(1 + 0.05) + \left(\frac{Pi}{100}\right)\left(\frac{66 + T_{n-1}}{12}\right)$ where P is the personal account, and $n = 1, 2, 3, \dots$	2x	10x	10x	5x	0.3x

The premium life table shows that the premium covers a child in the death coverage and pension for the participant. This model cover for other riders such as health, accident, hospital costs, loss of effort to work, critical illnesses, education and also pension (Puspa, 2010).

Based on the client quotation of a family takaful as shown in Table 13, the table has detailed information. The total payment for 17 years is RM5 944. The participant can earn RM5 944 for his child's education without the management fee. Therefore, the net maturity value is RM5 944. If the participant is insured for 3 units, the maturity value is RM17 382. The riders are also multiplies by 3, so the death coverage for the participant is RM30 000 if the child dies and there is a pension of RM900 for the child if the participant dies. In the Wakala model, the participants need to pay more premiums because the Wakala fee has to be paid every month. Therefore, the participant will earn less in maturity value or surrender value compared to the Mudharabah model. (Ghazali et.al, 2011b)

Model of Acceptance in Integration Model:

The researchers hope that this article will give some guidelines and information about the product whether it is good for all categories income earners or not. As research finding, we found six among the respondents and they are; (Ghazali et. al, 2012)

- i) By using the Guttman Split-half scale, the items that have been used in the questionnaire are reliable because the probability is more than 0.5 where reliability coefficients is 0.7599.
- ii) It shows that 99.8% of the respondents can afford to buy at least one unit of takaful plan.
- iii) It shows that 100% of the respondents have agreed that this takaful plan cover all the risks.
- iv) It shows that 96.3% the respondents have agreed that this new takaful plan is affordable for all categories income earners.
- v) There is a strong correlation where $r = 0.839$ between the numbers of units the respondents will buy and monthly salary.
- vi) There is quite a strong correlation where $r = 0.541$ between the levels of education of the respondents and their monthly salary.

Implementation of Integration model in Islamic Insurance:

Implementation of Integration model can be undertaken by various party namely are Pusat Zakat, Maidam, Baitulmaal, Tabung Haji and also by any private party such as Takaful Malaysia, Etiqa Takaful, Takaful Ikhlas and also other takaful company that is interested used this model. Something most importantly is can provide social responsibility to people without know the religious background. This will be giving belief to non-Muslim person where Islamic financial system is the best because beside based on profit but in state that is same, this system could give aid to person that is less capable (Parker, 2010).

Payment RM50 will be able to bring the profit to company, by using the premium payment used to invest into depositor remains at any bank that used the Islamic financial system or in sukuk (Islamic bond) to get the profit (Norzuhaira, 2009). The Profit is used for the company to pay the claim and also maturity value to the participants. Calculation of the profit is based on premium total amount to each year, so surrender value can be computed by using formula below.

$$\text{Surrender Value} = P(1+r) \left(\frac{(1+r)^n - 1}{r} \right)$$

Where P is the total yearly premium payment (monthly instalment premium payment), n is the number of investment year and r is the interest rate ($r = 0.05$) as shown in the Table 16.

The calculation for the surrender value using the value of the profit rate of 5% but if the investment made to give the advantage of better rates, then the surrender value would be higher from the Table 4.4. Therefore, the company or charity centre will be able to earn the profit of this method to benefit of the Muslim nation. If the Tabung Haji effort to give an annual bonus of 5% to the members, so it means that members have at least 7.5% profit including an additional bonus rate of 2.5% per Hijrah year.

Discussion:

In above, there are three models for findings the comparison between each other. Every model had their advantage and disadvantage but in the construction of the new model, we can minimize the disadvantage of the model.

For example in Mudharabah existing model, the most significant weakness in this model is obtained by the insured child's death when a participant dies is less even though the premiums approaching maturity. The child should get more for the insured death because a participant pay premiums and investment approaches the maximum limit of the old habits that earn more. In the other hand, the weakness of Wakala existing model is the

investment to the children's education fund. If the child dies then the participants will be rewarded with a turnover higher than at maturity. This show seems like the child died in the takaful business. The child should be rewarded more if the participant dies but in Wakala model, the child earn less compared to his death. Significant weakness of life insurance model is the client's proposal cannot provide complete data to the client if there is a case of early surrender before maturity. This data is not shown to customers as well as with the death coverage if the child died before maturity.

Table 16: Calculation of Surrender Value.

Year	Yearly cumulative Premium (RM)	Formula of Surrender Values	Calculation Of Surrender values	Surrender values (RM)
1	600	$P(1+r)^n \left(\frac{(1+r)^n - 1}{r} \right)$	630	630
2	1200		1291.5	1292
3	1800		1986.075	1986
4	2400		2715.37875	2715
5	3000		3481.147688	3481
6	3600		4285.205072	4285
7	4200		5129.465325	5129
8	4800		6015.938592	6016
9	5400		6946.735521	6947
10	6000		7924.072297	7924
11	6600		8950.275912	8950
12	7200		10027.78971	10028
13	7800		11159.17919	11159
14	8400		12347.13815	12347
15	9000		13594.49506	13594
16	9600		14904.21981	14904
17	10200		16279.4308	16279

The proposed model of new premium life table in education plan has to combine all the riders in one plan and the name be changed to Economic Education Plan Takaful. The rider should include health, accident, hospital costs, loss an effort to work, critical illnesses, education, death benefit, death coverage and also pension. Life insurance or family takaful is needed for everyone in the modern, so the product must affordable to every category of income earners.

This new plan offers complete riders for two persons in one product plan; participant and a child. The monthly premium is reasonable to all categories income earners. The plan offers buying multiple units for the product business. If the participant buys more than 1 unit, the value of premium, riders, surrender value and maturity value have to be multiplied by the numbers of units bought by the participant.

After interviewing the 410 respondents using the questionnaire, almost all the respondents agreed that the integration model of education plan takaful could attract all categories of income earners into buying it. The most attractive aspect about this model, the plan offers affordable price for all categories of income earners and it also includes almost complete riders. This research has proved that the new idea of integration model in education plan takaful has been accepted by all categories of income earners.

Conclusion:

In the modern world, the stable of the business trade system has to be found because for avoiding the resection years which happened in 1997 because speculation activities but in 2009 the subprime of the credit. The resection not recover until 2012 because the weakness of the euro. Therefore, Islamic Insurance is the way for nation to save their money and avoiding the world from another resection year.

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