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Research Paper

Designing a model to determine the preferred Islamic contract for a bank facilities applicant

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Abstract

This paper aims to present a model to determine the preferred Islamic contract for the bank facilities applicant in the industrial sector. For this purpose we use a consolidated method which includes the compromise solution multi-criteria optimization in the first phase, and the calculation of the cost of financing for the applicant of facilities in the second phase. Afterwards, by using the output of the both-phase, the preferred Islamic contract based on the combinational criterion has been determined for the applicant of the facilities. According to the fact that in the financing of the projects, in addition to the criteria related to the cost of financing, the qualitative criteria are also important, so both the qualitative and quantitative criteria have been considered in this research. In this study, we used four widely applied Islamic contracts (Jo'aalah Instalment sales, Hire purchase, Participation). The assessment criteria of the Islamic contracts have been extracted in the form of a questionnaire based on the previous studies and the expert's point of view. In the first phase, the Analytic Hierarchy Process (AHP) has been used in order to determine the weights of the evaluation criteria of the Islamic contracts; and, in order to select an appropriate contract for the applicant, the compromise solution multi-criteria optimization approach (VIKOR), which is based on the decision matrix, was used. In the second phase, the cost of financing from the bank was estimated for the applicant of the facilities in the four contracts. Finally, the obtained results of the qualitative questionnaire and the cost of financing from the bank have been combined; thus, the preferred contract for the applicant of facilities has been determined based on a combinational criterion.

Keywords: *Islamic Banking; Islamic Contracts; Multi-Criteria Optimization; Analytical Hierarchy Process.*

1. Introduction

In general, clients, in Islamic banks, are granted facilities in form of different contracts under certain conditions and regulations, including partnership, Mudarabah, hire purchase, installment sales, sharecropping contract, Mosaghat (agricultural partnership), direct investment, forward purchase, and contract of reward. Of these, four common contracts in Islamic banks have been introduced according to the experts' opinions, which were the research selection, comparison, and assessment criteria.

Hire purchase: is an arrangement for enjoying the interests, real estate, and or human labor through paying regular installments. Hire is a contract leading to interests transfer in return for certain installments; while, the original property remains under the landlord ownership [1].

Installment sales: It is a credit sale where goods is prepared and provided to the customer following transaction and the payment is deferred on parties agreement i.e. the customer timely pays to vender [2].

Contract of reward: It literally means a property placed as a task wage; it legally refers to gaining profit against returns regardless of bounded by informed action and wage [3].

Civil partnership: In literal term, partnership refers to joint ownership; in term of jurisprudence, it is the rights accumulation of multiple owners distributed on a single object [3]. According to another definition, civil partnership implies jointly incorporation of cash and noncash contributions (partners' portions) owned by multiple legal and natural individuals for the benefit under the contract. The contract is personally legitimate, unless the parties are deprived of the authority in the meantime of a negotiation [4].

The present research tried to determine the desired preferred contract, through an integrated model, for bank facilities client respecting qualitative and quantitative criteria (financing cost, bank risk contribution, market risk, interest rate, customer financing, number of sponsors, security amount, facilities amount, facility speed, term of facility). The criteria were extracted through literature review, library studies, survey, and expert recommendations. Then, the criteria relative significance was specified for the research sample. According to Islamic contracts assessment criteria and sub-criteria paired comparison and regarding the hierarchical structure, the criteria and sub-criteria were weighted using analytical hierarchy process (AHP) approach. In addition, multi-criteria optimization and compromise solution (VIKOR) method was also used to compare, prioritize, and to identify the desired Islamic contract for each client. Then, bank financing cost was appraised for the sample client in four considered contracts. And finally, using an integrated approach, a desired preferred contract is achieved for the bank facility client.

2. Research background

There was seen no study in the literature directly assesses bank facilities and selects Islamic contract relative to the client requirement. However, the most consistent national and international studies are discussed as follows.

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According to [5], client effective assessment process criteria are categorized into four classes as 1. assessment results and expert opinions (10 economic analysis factors); 2. integrity, trust, and facility history (11 factors related to individual or institutional client characteristics); 3. justified plan (7 financial analysis factors); 4. bank strategic and accessible resources (varies depending on each bank); and finally, 5. senior management opinion (4 factors of technical feasibility). The expert scored criteria from excellent, good, moderate, poor, and the poorest; next, acceptance percentage is computed; and as a result, the management adopts the decision.

Chen, Shen, Lin et al [6], studying Thai banks, found out that banks and customers both are interested in the criteria such as loan amount, loan term (payment beginning and ending), interest rate, fixed or floating loan, as well as state policies to grant or get a loan.

Mandalaa et al [7] introduced income, monthly expenditures, savings, guarantee value, facility term, age, sex, the type of guarantee, as well as the client profession as important criteria.

Mohammadi [8] examined payback period, reverse payback period, accounting rate of return, net present value, internal rate of return, and profitability index.

Castro [9] provided industry health status, financing amount, capital sources, financial investment, income, management history, as well as interest rate criteria as the most significant factors.

Olson et al [10] declared the following criteria, total sales, total income, gross profit/loss, and previous repayment records.

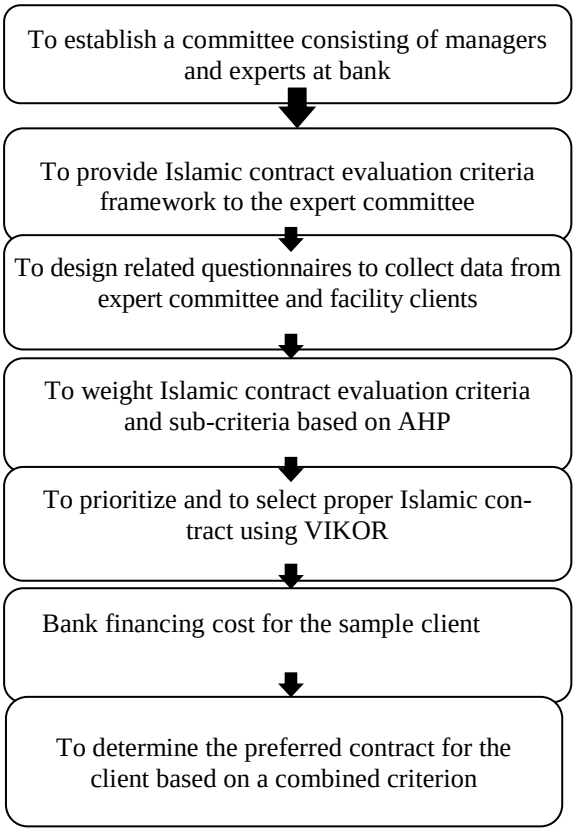
Halkos and Tzeremes [11] expressed interest rate, facility amount, certification, net income, and previous repayment records as important criteria of decision-making.

Aghili [12] studied several risks: market risk including interest rate changes, exchange rate changes, goods and stock price changes, and the correlations; credit risk including loan granting risk, sales, and financial instruments transactions; liquidity risk implying bank inadequacy risk in financing or timely payment (deposits); and operational risk involving expected transaction risk, trust and credit risk, contract implementation risk, and personnel risk.

Research methodology

This is an applied study in term of purpose and a descriptive survey in term of data collection. Further, data were cross-sectionally collected within 2014-2015. Research main data were gathered using library study and banking expert opinions through a researcher-made questionnaire. Research statistical population and sample can be explained from two visions. The first refers to the individuals bounded to identify Islamic contracts assessment criteria and to complete decision-making matrix. And the second statistical population embraces the aforementioned bank facilities client. Since an client completes the questionnaire respecting its own status, conditions, and vision, and regarding that it is impossible to generalize a decision for all; thus, sampling was has been eliminated. The research has been conducted in two phases; and the preferred contract was obtained depending on the client requirements using the two-phase combinations. At the first phase, regarding paired comparison of Islamic contracts assessment criteria and sub-criteria and the dominant hierarchical structure, criteria and sub-criteria were weighted through analytical hierarchy process approach. Furthermore, the desired Islamic contract was compared, prioritized, and determined using multi-criteria optimization and compromise solution (VIKOR) for each client. Financing costs, at the second phase, as facilities like contract of reward, installment sales, hire-purchase, as well as partnership were computed for the sample client by appraising total current value of client payments to the bank through several contracts. Next, total current payment value is divided to the amount of received facility. Then, the prior step answer ascendingly represents the best contract for the client. And ultimately, the preferred contract is estimated using combined phase one and two.

According to the aforementioned and proposed objectives, the following picture step-wisely illustrates the research proposed thematic framework.



3. Questionnaire design

An expert committee consisting of managers and practitioners was initially established in the understudied bank and Islamic contract evaluation criteria framework was provided to the expert committee to give judgment and final framework. According to the literature and experts descriptive data documentation, facility criteria have been attained depending on the typical contract using Delphi method, as seen in Table 1.

Table 1:

Sub-criteria	Main criteria
Facility term (period)	Time components
Facility speed	
Guarantee type	
The amount of facility	Facility requirements
The amount of guarantee	
Number of guarantors	
Financing amount by customer	
Facility rate of return	
Market risk	Risk
Bank share in risk	

In order to collect data, two questionnaires were designed. The first was for the facility clients gathering the required data for decision-making table; and the second was for experts. Qualitative data of the second questionnaire were extracted using experts opinions geometric mean, and quantitative data were determined using the items specified in the Islamic contract agreement of understudied bank.

Geometric mean of experts opinions for qualitative criteria of Islamic contracts evaluation

Table 2:

	Type of guarantee	Facility speed	Bank share in risk	Market risk
Contract of reward	3.32	8.19	3.81	2.26
Partnership contract	6.41	5.8	7.67	6.86
Hire-purchase	5.8	7.38	4.44	3.33
Installment sales	5.26	7.88	4.01	4.83

According to the results of expert committee on qualitative criteria of Islamic contract evaluation, and regarding information obtained from Islamic contract agreement, the final decision table for the industry sector is as follows.

4. Decision-making matrix

Table 3:

Decision matrix	time components		Facility requirements						Risk	
	Facility term (period)	Facility speed	Guarantee type	The amount of guarantee	Number of guarantors	Financing amount by customer	Facility rate of return	The amount of facility	Market risk	Bank share in risk
Contract of reward	3	8.19	3.32	227858807	2	33600000	21	168000000	2.26	3.81
Partnership contract	3	5.80	6.41	237280293	2	33600000	24	168000000	6.86	7.67
Hire-purchase contract	4	7.38	5.80	218493944	0	44100000	21	147000000	3.33	4.44
Installment sales contract	3	7.88	5.26	227858807	2	33600000	21	168000000	4.83	4.01

1) Islamic contract evaluation criteria and sub-criteria weighting using analytical hierarchy process (AHP) approach.

Islamic contract evaluation criteria and sub-criteria are designed here relying upon AHP approach. The hierarchical method is initially described.

Analytical hierarchy process (AHP) approach

AHP approach is a structured technique has been initially introduced in 1970 by Thomas L. Saaty. The method shows great potential for decision-making; also, it provides analyses and turns complex problems into much more simplistic and logical hierarchies so that it is enabled to easily evaluate the alternatives by the aid of criteria and sub-criteria through the planning framework (Amiri and Darestani farahani, 2013). AHP is of known approaches that determines paired-comparison matrix-based weights. It consists of several stages, which are described as follows:

First step: Mapping the problem hierarchy structure

At the first step, the problem hierarchical structure is formulated. Hence, the general purpose or the goal of the problem lies above the hierarchy and decision options fall at the bottom (Majumdar, 2010).

Second step: Forming paired comparison matrices

Consistent data for item comparisons are attained here. It requires the decision maker to make higher level element paired comparison matrices (Majumdar, 2010). Finally, an M×N decision matrix is formulated using items relative scores for each criterion. For relative scales of real numbers at AHP, 1-9 and the inverse were applied for a systematic prioritization.

Third step: Matrices consistency measurement

At this step, hourly consistency rate is estimated per matrix.

$$CR = \frac{CI}{RI} \tag{1}$$

Fourth step: Weighting criteria and sub-criteria

At this step, relative significance of various criteria and the sub-criteria scores are obtained regarding the goal of the problem and criteria. For N criteria, the comparison matrix (CM) is N×N, where C_{ij} shows the ith criterion relative significance input in term of j.

$$\forall\, i = j\,, C_{ij} = 1 \;\&\; C_{ij} = \frac{1}{C_{ji}} \tag{2}$$

$$CM = \begin{bmatrix} 1 & C_{12} & \dots & C_{1N} \\ C_{21} & 1 & \dots & C_{2N} \\ \vdots & \vdots & 1 & \vdots \\ C_{N2} & C_{N2} & \dots & C_{NN} \end{bmatrix} \tag{3}$$

The ith relative weight (w_i) is obtained by the ith row geometric means (GM) and the abovementioned matrix GMs normalization.

$$GM_i = \{\prod_{j=1}^{N} C_{ij}\}^{\frac{1}{N}}\,;\, W_i = \frac{GM_i}{\sum_{i=1}^{N} GM_i}\,,\,)$$

$$\text{Negative criterion}(\; W_i = \frac{\frac{1}{GM_i}}{\sum_{i=1}^{N} \frac{1}{GM_i}} \tag{4}$$

Therefore, Islamic contract evaluation criteria and sub-criteria weighting is achieved as follows using AHP approach.

Main Criteria Paired-Comparison Matrix

	Time components	Facility requirements	Risk	Final weight
Time components	1	2	4	0.571
Facility requirements	0.5	1	2	0.286
Risk	0.25	0.5	1	0.143

Time Components Criterion Paired Comparison Matrix

	Facility term (period)	Facility speed	Relative weight	Final weight
Facility term (period)	1	4	0.8	0.457
Facility speed	0.25	1	0.2	0.114

Facility Requirement Criterion Paired Comparison Matrix

	Type of guarantee	The amount of guarantee	Number of guarantors	Financing by customer	Rate of return	Facility amount	Relative weight	Final weight
Type of guarantee	1	3	3	2	1	1	0.21	0.06
The amount of guarantee	0.33	1	1	0.25	0.5	0.166	0.06	0.02
Number of guaran-	0.33	1	1	0.5	0.33	0.143	0.06	0.02

tors								
Financing by customer	0.5	4	2	1	1	0.5	0.15	0.04
Rate of return	1	2	3	1	1	0.25	0.14	0.04
Facility amount	1	6	7	2	4	1	0.35	0.1

Risk Criterion Paired Comparison Matrix

	Market risk	Bank share in risk	Relative weight	Final weight
Market risk	1	2	0.66	0.095
Bank share in risk	0.5	1	0.33	0.048

According to the assumed data, the sample observed that "time component" criterion weighting 0.571 is more significant than other criteria. The comparison results of main criteria weights for the client sample are as follows:

Time components> facility requirements> risk

2) Proper Islamic contract prioritization and selection using VIKOR

Here, Islamic contracts are compared and prioritized using compromise solution, which is summarized in the following.

Multi-criteria optimization and compromise solution (VIKOR)

It is one of compromise programming approaches to solve multi-criteria decision-making problems. VIKOR is used for inconsistent criteria problems in which the decision maker requires a closely similar solution to the ideal one; all options are evaluated in terms of criteria. Moreover, where the decision maker initially fails to specify and declare problem significance, the multi-criteria optimization and compromise solution may be regarded as a proper means of making decision. Options are ranked according to the ideal solution closeness. The proposed method was firstly used by Tzeng and Opricovic (2004) for environment and earthquake engineering. Let be m criteria and n items (options) in a multi-criteria decision-making problem. The best item is selected as follows:

- First step: decision matrix formation

Regarding the number of criteria and items, and all item evaluation for various criteria, the decision matrix is firmed:

$$D = \begin{bmatrix} X_{11} & \cdots & X_{1n} \\ \vdots & \cdots & \vdots \\ X_{m1} & \cdots & X_{mn} \end{bmatrix} \quad (5)$$

- Second step: criteria weight matrix

A matrix is defined, in the following, given various criteria significance index in decision-making:

$$W = [w_1, w_2, \dots, w_n] \quad (6)$$

- Third step: unbalanced decision-making matrix formation

Matrix elements are attained using the following equation:

$$f_{ij} = \frac{x_{ij}}{\sqrt{\sum_{i=1}^{m} x_{ij}^2}} \; ; i = 1,2,\dots,m \; ; j = 1,2,\dots,n \quad (7)$$

- Fourth step: the best and worst criteria values in the decision matrix

As seen in Table 4, the best and worst values for the positive and negative criteria are measured:

Table 4: The Best and Worst Values of Positive and Negative Criteria

Type of criterion	The best	The worst
Positive criterion	$f_i^* = max\, f_{ij}$	$f_i^- = min\, f_{ij}$
Negative criterion	$f_i^* = min\, f_{ij}$	$f_i^- = max\, f_{ij}$

Where, f_i^* is the best value of ith criterion and f_i^- is the worst value of the ith criterion from all items.

- Step fifth: measuring S and R values

Normal decision-making matrix

S and R values are obtained by the following relations, where W_i is the certain weight value for the ith criterion.

$$S_j = \sum_{i=1}^{n} w_i \frac{(f_i^* - f_{ij})}{(f_i^* - f_i^-)} \quad (8)$$

$$R_j = \max[w_i \frac{(f_i^* - f_{ij})}{(f_i^* - f_i^-)}] \quad (9)$$

- Step sixth: measuring Q value

Q value is estimated as follows:

$$Q_j = v\frac{(S_j - S^*)}{(S^- - S^*)} + (1 - v)\frac{(R_j - R^*)}{(R^- - R^*)} \quad (10)$$

$$R^* = \min_j R_j \, , R^- = \max_j R_j \quad (11)$$

$$S^* = \min_j S_j \, , S^- = \max_j S_j \quad (12)$$

- Step seventh: item organization in descending order values of R, S, and Q

At this step, items are organized into three groups respecting R, S, and Q values. Ultimately, the best choice is selected from all three groups. The items are ranked in descending order of R, S, and Q values. It is necessary to mention that, the best choice in Q is the one meeting the two requirements:

First condition: If $A^{(1)}$ and $A^{(2)}$ indicates the first and second best choice for group Q, respectively, and n represents the number of items, the following relation is achieved:

$$Q(A^{(2)}) - Q(A^{(1)}) \geq \frac{1}{n-1} \quad (13)$$

Second condition: $A^{(1)}$ must be the best at least in one of R and S groups.

When the first condition is not true, a set of items are selected as the best choices:

$$A^{(1)}, A^{(2)}, \dots, A^{(M)} = \quad (14)$$

The best choices

Maximum M value is obtained by the following equation:

$$Q(A^{(M)}) - Q(A^{(1)}) \geq \frac{1}{n-1} \quad (15)$$

If the second condition is not true, $A^{(1)}$ and $A^{(2)}$ are determined as the best choices (Opricovic and tzeng, 2007).

According to the aforementioned, normal decision-making matrix for each industrial facility client is obtained by equation 8, which are shown in the following tables.

Normal decision matrix	Time components		Facility requirements							
	Facility term (period)	Facility speed	Guarantee type	The amount of guarantee	Number of guarantors	Financing amount by customer	Facility rate of return	The amount of facility	Risk Market risk	Bank share in risk
Contract of reward	0.457	0.556	0.312	0.500	0.577	0.460	0.482	0.515	0.243	0.364
Partnership contract	0.457	0.393	0.602	0.520	0.577	0.460	0.551	0.515	0.737	0.735
Hire-purchase contract	0.610	0.501	0.544	0.479	0.000	0.604	0.482	0.451	0.358	0.425
Installment sales contract	0.457	0.535	0.494	0.500	0.577	0.460	0.482	0.515	0.519	0.383

Determining the best and worst values for the positive (profit) f_i^* and negative (cost) f_i^- criteria in normal decision-making matrix, and measuring R and S parameters using (9) and (10), Q VIKOR index value was obtained using (11). The results of final Islamic contracts ranking for the client are represented in the following table.

Q, R, and S values and final Islamic contract ranking for the sample client

Q	R	S
0.63	0.46	0.48
1.00	0.46	0.85
0.00	0.10	0.26
0.78	0.46	0.53

Islamic contracts with minimum Q values are selected as the proper contracts for the research sample. For this sample, facility in form of hire-purchase contract is the best.

Second Phase

Financing cost appraisal through bank for the sample client

To compute sample customer financing cost, it is assumed that the client is granted machinery facility in form of contract of reward, installment sales contract, hire-purchase, and or partnership contract. Financing costs of the contracts are compared as follows:

a) Total net present value of the client payments to the bank is estimated in form of various contracts.
b) Total net present value of the client payments to the bank is divided to the received facilities.
c) The result of (b) is ascendingly ordered.

3) For contract of reward and installment sales

The client receives 1680000000 facilities through a contract of reward and installment sales. Given monthly discount rate of 1.83%, and monthly installments, according to the Table 2, total net present value of the client payments to the bank equals 1658227548.31. Therefore, the client bank financing for one Rial in the contract of reward or installment sales is 0.98 R.

Table 2: Customer Cash Flow in Contract of Reward and Installment Sales

Year	Cash flow	Net present value
0	1680000000	0
1	63298072	62,160,534.22
2	63294000	61,039,512.33
3	63294000	59,942,563.42
4	63294000	58,865,327.92
5	63294000	57,807,451.55
6	63294000	56,768,586.42
7	63294000	55,748,390.87
8	63294000	54,746,529.38
9	63294000	53,762,672.47
10	63294000	52,796,496.59
11	63294000	51,847,683.97
12	63294000	50,915,922.59
13	63294000	50,000,906.01
14	63294000	49,102,333.31
15	63294000	48,219,908.97
16	63294000	47,353,342.80
17	63294000	46,502,349.80
18	63294000	45,666,650.10
19	63294000	44,845,968.87
20	63294000	44,040,036.21
21	63294000	43,248,587.06
22	63294000	42,471,361.16
23	63294000	41,708,102.87
24	63294000	40,958,561.20
25	63294000	40,222,489.64
26	63294000	39,499,646.12
27	63294000	38,789,792.91
28	63294000	38,092,696.56
29	63294000	37,408,127.82
30	63294000	36,735,861.56
31	63294000	36,075,676.67
32	63294000	35,427,356.06
33	63294000	34,790,686.49
34	63294000	34,165,458.60
35	63294000	33,551,466.76
36	63294000	32,948,509.04

5. Hire-purchase contract

The client is granted 1470000000 R facilities through a hire-purchase contract. Regarding the discount rate of 1.83% in months, and monthly installments, total net present value of the client payments to the bank is 1445792119.31 R. Thus, the client financing cost for one R in hire-purchase contract equals 0.98 R.

Table 3: Customer Cash Flow for Hire-Purchase Contract

Year	Cash flow	Net present value
0	1470000000	0
1	45546437	44,727,916.13
2	45519000	43,897,645.30
3	45519000	43,108,755.08
4	45519000	42,334,042.11
5	45519000	41,573,251.61
6	45519000	40,826,133.37
7	45519000	40,092,441.68
8	45519000	39,371,935.27
9	45519000	38,664,377.17
10	45519000	37,969,534.68
11	45519000	37,287,179.30
12	45519000	36,617,086.61
13	45519000	35,959,036.25
14	45519000	35,312,811.80
15	45519000	34,678,200.72
16	45519000	34,054,994.33
17	45519000	33,442,987.65
18	45519000	32,841,979.43
19	45519000	32,251,772.00
20	45519000	31,672,171.27
21	45519000	31,102,986.61
22	45519000	30,544,030.85
23	45519000	29,995,120.15
24	45519000	29,456,073.99
25	45519000	28,926,715.11
26	45519000	28,406,869.40
27	45519000	27,896,365.90

28	45519000	27,395,036.73
29	45519000	26,902,717.01
30	45519000	26,419,244.83
31	45519000	25,944,461.19
32	45519000	25,478,209.95
33	45519000	25,020,337.77
34	45519000	24,570,694.06
35	45519000	24,129,130.97
36	45519000	23,695,503.26
37	45519000	23,269,668.33
38	45519000	22,851,486.13
39	45519000	22,440,819.14
40	45519000	22,037,532.30
41	45519000	21,641,492.98
42	45519000	21,252,570.93
43	45519000	20,870,638.25
44	45519000	20,495,569.33
45	45519000	20,127,240.82
46	45519000	19,765,531.60
47	45519000	19,410,322.69
48	45519000	19,061,497.29

6. Partnership contract

The client is granted 1680000000 R through partnership contract. Let the discount rate be 22% and realized profit equals 245 per year (seen in Table 4). Total net present value of the client payments to the bank is 269218024.84. Hence, the client financing cost per one R by means of partnership contract is 0.16 R.

Table 4: Customer Cash Flow in Partnership Contract

N	Cash flow	Net present value of payments
0	1680000000	0
1	131828925	108,056,495.90
2	131822000	88,566,245.63
3	131822000	72,595,283.31

As a result, financing cost of 4 typical facilities is provided in Table 5.

Table 5: Financing Cost of One R for the Facility Client

Partnership	0.16
Hire-purchase	0.983
Installment sales	0.987
Contract of reward	0.987

Hence, the best contract for the client sample is partnership, hire-purchase, installment sales, and contract of reward in order per one Rial.

The first and second phase integration

To determine the preferred contract for the client based on an integrated criterion

At this section, the results of the qualitative questionnaire are integrated with bank one R financing cost. To do this, the qualitative and financial sectors are weighted by the client. Then, the values of Table 5 are normalized and integrated to the qualitative values respecting the sample client weights.

Table 6: Normalized One Rial Bank Financing Cost for the Client

Partnership	-1.49
Hire-purchase	0.493
Installment sales	0.503
Contract of reward	0.503

The preferred contract is now specified for the sample client. The client was asked to score the total extracted qualitative criteria and financing cost. The sample scored 35% and 65% for qualitative criteria and financing cost, respectively from 100. Now, the integrated criterion for various contracts is estimated:

For partnership

(0.35*1)+ (0.65*-1.499) = - 0.62

For contract of reward

(0.35*0.69)+ (0.65*0.503) = 0.56

For hire-purchase

(0.35*0)+ (0.65*0.493) = 0.32

For installment sales

(0.35*0.78)+ (0.65*0.503) =0.599

Table 7 exhibits different contracts scores for the facility client.

Table 7: The Client Contract Prioritization

Partnership	-0.62
Hire-purchase	0.32
Contract of reward	0.56
Installment sales	0.599

In the above table, the minimum scores imply the contract prioritization. In this regard, the preferred contract of the sample client is the partnership contract.

7. Conclusion

The present research has been conducted to design a model to evaluate Islamic contracts and to determine a proper preferred contract for industrial sector clients. As in project financing, qualitative criteria are as significant as financing cost criteria; thus, the present study has considered both quantitative and qualitative criteria and has tried to take into consideration financing issue and qualitative criteria such as market risk, bank risk, facility speed, as well as the type of guarantee through an integrated criterion so that a proper preferred contract is achieved for the client. At the first phase, which was organized relying on multi-criteria decision-making techniques, hire-purchase contract was selected as the best contract for the client facility request. At the second phase consisting of the sample client financing cost measurement, the best contract is partnership. And finally, the best of integrated phase was determined through scoring the qualitative criteria and financing cost. Therefore, partnership contract was the best of the integrated phase.

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