



Profit and Loss Sharing Financing, Mark-up Products or Conventional Debt? Application of Analytic Hierarchy Process

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Abstract

Financing SMEs is one of the most critical problems faced by entrepreneurs. PLS (Profit and Loss Sharing) and mark-up instruments are two sets of Islamic modes of financing developed as a substitute for conventional debt, which is typically adopted by SMEs. However, with larger finance offerings, it becomes more complicated for SMEs to determine the best financial instrument. Indeed, the financing decision involves a trade-off between tangible and intangible factors. Therefore, using an experts' decision-making in evaluating financial products is a beneficial way to assist SMEs choosing the most appropriate one. The purpose of this paper is to apply the Analytic Hierarchy Process (AHP) in selecting an instrument to finance SMEs. Financial suitability, cost, risk, management intervention and profitability are the criteria upon which the financial decision is based in the current study. The results show that PLS equity finance complies with the SMEs profile more than mark-up products and traditional debt. The study has concluded with suggestions for future research.

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Keywords: Analytic Hierarchy Process (AHP), multi-criteria decision making, Profit and Loss Sharing (PLS), Mark-up, Debt, selection.

1. Introduction

Traditional debt is the most common source of finance for many SMEs to fulfill their operational investment needs. However, bank lending poses challenges to SMEs, particularly, to newer companies, with a higher risk profile. Therefore, Islamic banking proposes new approaches to SME finance using the two parent principles: Profit and Loss Sharing (PLS) comprising mainly of *mudaraba* and *musharaka*; and mark-up (mostly applied through *murabaha*). Studies conducted by Islamic economists emphasize the benefits of the PLS to SMEs compared to the mark-up.

Morocco represents an emerging Islamic market industry. The country has recently introduced a law to regulate Islamic financial products and allow local and foreign banks to set up units that comply with the religion's ban on interest. Morocco's SMEs will now have more options by accessing to both Conventional and Islamic financial products. Therefore, the selection of an effective financing method to suit the SMEs' needs is essential. Many information sources present criteria about choosing an appropriate financial product and let the borrower compare and decide which one is the most suitable. In practice environment, Morocco's SMEs have to face with a variety of financial instruments' information which make difficult to select an alternative.

The multi-criteria decision making (MCDM) helps to find the best alternative in the presence of multiple criteria. Therefore, using the experts' decision making is a beneficial way to help SMEs in the financial product selecting process. Analytic Hierarchy Process (AHP) is one of the different methods of MCDM problems. The AHP is identified to be an efficient and flexible method for rating and ranking decision alternatives in order to select the best ones when decision maker has several qualitative and quantitative criteria (Cheng and Li, 2001; Braglia, 2000).

The objective of this paper is to apply the AHP method to determine the relative importance of the decision criteria in order to select the most relevant financial product for SMEs. PLS instruments (namely *mudaraba*, *musharaka* and *musharaka mutanaqissa*), mark-up products and traditional debt are the alternatives that will be compared.

The paper is divided into six sections including the introductory section. The second section reviews some related works on the subject. The third section describes the research methodology, followed by the discussion of data gathering and preprocessing in the fourth section. Section five analyzes the findings and the final section provides some concluding remarks.

2. Literature review

Traditional bank lending is the most common solution offered to SMEs to fulfill their financial needs. Access to conventional debt requires tangible collaterals and high interest rates. Interest is paid even if a firm suffers from losses and the firm must guarantee the bank's profit. This practice is considered illogical, irrational and unfair (Ahmad, 1947; Siddiqi, 1983; Chapra, 1985).

Islamic financial institutions developed several financial products to compete with interest-based financing. These products would fulfill the *Maqasid al-Shari'a* and provide the same value as conventional modes of financing (Rammal, 2004). The main Islamic financial products include PLS modes (*mudaraba* and *musharaka*) and mark-up products.

Both PLS and mark-up have their strengths and weaknesses according to several factors. Therefore, different attitudes regarding the preference for PLS and mark-up modes of Islamic financing can be cited. Many researchers identify PLS as the most distinct from interest-based financial instruments (see, e.g. Siddiqi, 1988; Khan, 1992). Indeed, the PLS is characterized by risk sharing between the entrepreneur and the financier, which encourages entrepreneurial activities. In addition, the PLS modes of finance do not require collateral, thus facilitate access to funds. Moreover, financial institution ensure technical support and efficiency through the PLS contracts that combine the interests of both parties (Khan, 1995).

However, a firms' attitude towards risk changes over time according to their experience with entrepreneurship. In other words, in their initial stages, infant firms avoid risk and would have preferences for PLS financing, which is not the case of growing firms (Khan, 1995). Indeed, firms in a growing phase do not prefer equity financing involving PLS, preferring to avoid new partners and the risk of losing control. Moreover, there are other reasons for PLS contracts to not be as popular as one might expect. Some of these are problems are moral hazard, adverse selection, high information requirements and higher transactions costs (Ahmed, 2002; Abalkhail and Presle, 2002).

Mark-up products, on the other hand, are viewed to be the most important Islamic substitute for interest. In addition, the PLS modes are inappropriate for some financial needs where no profit-sharing is expected (Homoud, 1976). Moreover, Ismail (1989) argues that the mark-up is a fixed price and not a rate of return on financing. Hence, this mode is a relevant alternative to interest-based financing approved by the banks' *shari'a* consultants. However, mark-up and interest-based instruments concentrate all risks on the entrepreneur (Khan, 1995).

PLS financing is the closest to the spirit of Islamic finance. However, the implementation of PLS contracts as compared to debt based contracts is very limited. Several studies explain this phenomenon by the asymmetric information problem and the complex risks faced by Islamic banks in applying *mudaraba* and *musharaka* financing*. However, Akacem and Gilliam (2002) and Mehmet (2007) argue that the partnership-sharing modes of financing require risk management techniques and expertise in overseeing the investment projects from the banks. The banks need to devote adequate resources to risk identification and measurement. Therefore, the authors concluded that risk-based argumentation is not convincing. Thus, they suggest further research in order to support the practice of PLS (Eddy Yusof and al., 2009).

*"There are some issues in practicing *mudaraba* and *musharaka* financing. For instance, financial risks, business risks, rate of return risks, equity investment risk and fiduciary risk" (Shodiq, 2012).

Using the AHP approach, this study compares PLS instruments (namely, *mudaraba*, *musharaka daima* and *musharaka mutanaqissa*), mark-up products and conventional debtin order to select the most convenient financial instrument for SMEs, without emphasis on the religious aspects.

3. Research Methodology

AHP is one of the MCDM methods, developed by Saaty (1980), to deal with complex decision making by reducing it to a series of pair-wise comparisons. It is an effective tool to determine the priorities among different criteria, comparing alternatives for each criterion. In addition, by checking the consistency of the decision makers' evaluations, the AHP reduces the bias in the decision making process. According to Saaty, the basic procedure to carry out the AHP consists of three steps as shown in the following Table:

Table 1: Saaty's AHP Process.

	Steps	Explanation
Step 1	Decomposing the decision problem into a hierarchy.	The first level contains the overall goal of the decision problem, the intermediate levels identify the criteria and sub-criteria affecting the decision, and the final level indicates the possible alternatives.
Step 2	Constructing a set of pair-wise comparison matrices.	This step consists of calculating the relative importance weights of decision criteria in each level of the hierarchy. Using the pair-wise comparisons, the decision maker assesses the priority score for each pair of criteria. The pair-wise comparison matrices are then constructed and the average weight for each normalized criterion is computed.
Step 3	Evaluating the decision alternatives.	The alternative scores are combined with the criterion weights to produce an overall score for each alternative taking into account the weights of each criterion.

There are three underlying principles of AHP namely the construction of hierarchy, the establishment of priorities and the logical consistency (Takala, Suwansaranyu, & Phusavat, 2006). The construction of hierarchy requires identifying the study's objective, criteria and alternatives.

The aim of the current study is to select the most appropriate financial instrument for an SME using different criteria. Saaty (1984) points out that when the number of criteria exceeds nine, another level must be added to the hierarchy to create homogeneous criteria groups. Saaty (1984) joined the "7 ± 2" rule presented by Miller (1956). Miller's original theory argues that there should be no more than 7 (plus or minus 2) items in their short-term memory. Therefore, the number of criteria should be more than two but less than seven. Hence, six criteria were collected based on the consideration of literature.

Meziani and Rezvan (1998) applied the AHP Model in selecting an instrument to finance a foreign direct investment. (1) Cost and (2) risk are the two factors used by the authors in evaluating the financial products. In addition to these factors, (3) suitability of instruments to meet SMEs' financial needs, (4) collateral requirements, (5) financial institution management intervention and (6) the impact of the financial instrument on SME's profitability are relevant factors to evaluate financial products.

Before starting the research according to the AHP method, a first questionnaire was designed to identify the importance of each criterion. The respondents are three financial specialists with more than eight years of experience. In order to identify relevant criteria, the respondents were asked to rate each factor by using numbers from 1 to 10. The results are summarized in Table 2. With an average more than six, all the criteria selected are retained.

According to the life cycle approach (Berger and Udell, 1998), SMEs' financial requirements vary depending on their stages of development (inception phase, growth phase and maturity phase). Hence, the suitability criterion is divided into three sub-criteria representing distinctive stages.

Table 2: Factors affecting the selection of a financial product.

Criteria	R(1)	R(2)	R(3)	Average
Suitability	10	8	9	9
Cost	10	9	8	9
Risk	8	9	8	8.33
collateral	6	9	6	7
Management intervention	5	8	7	6.67
Profitability	10	9	9	9.33

After defining the criteria and sub-criteria, the next step involves building the AHP Model. The developed AHP hierarchy contains four levels: the goal, the criteria, sub-criteria and alternatives. Figure 1 shows an illustrative 4-level hierarchy for the financial instrument selection problem. The goal of our study in selecting financing method for SMEs is identified in the first level. The second level contains criteria namely, suitability, cost, risk, collateral, management intervention and profitability. The third level of the hierarchy consists of 3 sub-criteria previously identified. Finally, the lowest level of the hierarchy contains the alternatives (the different financing methods): PLS financing, mark-up products and conventional debt. PLS financing can take the form of *mudaraba*, *musharaka* and *musharakamutanaqissa*. Each of these products has its own characteristics. Therefore, our study examines how these financing methods are prioritized with respect to each criterion.

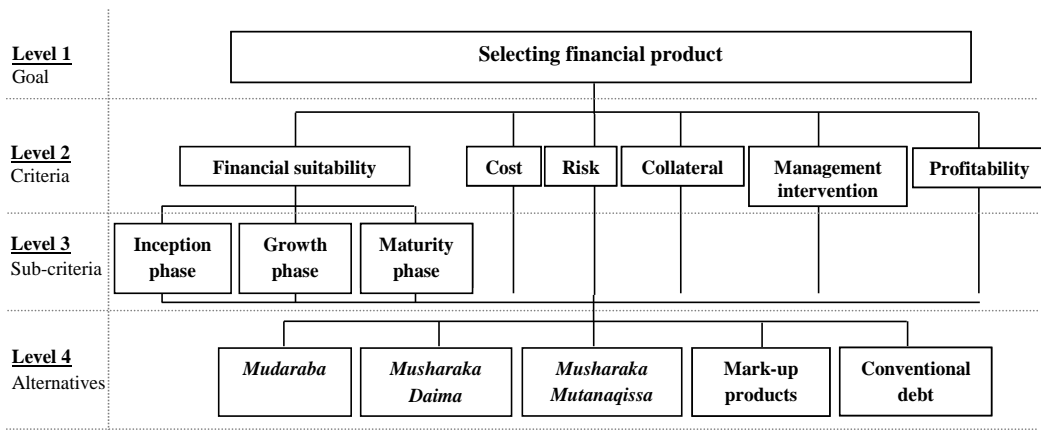


Figure 1: Hierarchical Structure for selecting method of financing of a SME

4. Data Gathering and Preprocessing

This section presents the way to collect the data of financial products and the steps of generating the pair-wise comparison matrices.

4.1 Collecting Data

At this step, we prepare a questionnaire consisting of all factors in order to collect the pair-wise comparison judgments. The reliability of the pair-wise comparisons depends on the experience of the participants. The AHP method allows many respondents in order to collect different opinions. However, a high number of comparisons may involve inconsistency of these opinions (Büyüközkan, 2004). Hence, the survey would allow a smaller number of respondents since experience is counted. Nineteen experts with more than five years of experience in Islamic banking and finance participated in the current study. In addition to the number of years of experience, the number of publications related to the Islamic finance industry is taken into account. These criteria reflect the credibility of the respondents. The responses were received from financial consultants and university professors. The profiles of the respondents are presented in Table 3 with more details in Appendix 1.

Table 3: Profiles of the respondents.

Variables		Number
Academic qualification	Master	10
	PhD	9
Position	University professor	7
	Financial consultant	8
	Financial consultant and university professor	3
	Chief Research Officer	1
Number of years of experience	5 - 10	2
	10 - 20	5
	21 - 30	7
	31 - 40	4
	More than 40	1
Number of publications and research papers in Islamic banking and finance	Less than 10	6
	10 - 20	5
	21 - 30	4
	31 - 40	2
	More than 40	2

The questionnaire contains some introductory notes on the objectives of the study and the purpose of conducting each section. The first section of the questionnaire lists the features of financial products and allows the experts to give their preferences using the nine-point scale proposed by Saaty (1980), as shown in Table 4, which indicates the level of relative importance from (1)equal, (3)moderate, (5)strong, (7)very strong, to (9)extreme importance. Numbers 2, 4, 6 and 8 represent intermediate values between two adjacent arguments. The second section provides the list of the financial instruments. The experts were requested to evaluate each of them by considering all the criteria and sub-criteria mentioned.

Table 4: Saaty's Measurement Scale

Verbal Judgment of Preference	Numerical Rating
Equal importance	1
Equal to moderate importance	2
Moderate importance	3
Moderate to strong importance	4
Strong importance	5
Strong to very strong importance	6
Very strong importance	7
Very strong to extreme importance	8
Extreme importance	9

4.2 Generating the Pair-Wise Comparison Matrices

The next phase after the questionnaires answered by experts is to establish the pair-wise comparison matrices. The number of comparisons is a combination of the number of products to be compared. Since we have five financial products, ten pair-wise comparison matrices are obtained using this formula:

$$\frac{n(n-1)}{2}$$

Expert Choice software program was utilized to compute from the pair-wise comparison matrices, the priorities of the financing methods based on six criteria and three sub-criteria. However, the first matrix is constructed to evaluate the importance of the criteria selected. Using the matrix related to the profitability criterion (Table 5), we provide some explanations about the matrices construction.

For example, comparing *mudaraba* and *musharaka mutanaqissa*, *musharaka mutanaqissa* is slightly preferred, thus we put 1/3 in the row 1 column 3 of the matrix. Comparing *mudaraba* and mark-up products, *mudaraba* is strongly preferred, thus we put actual judgment 5 on the first row, column 4 of the matrix. Comparing mark-up and conventional debt, mark-up products have equal to moderate importance.

Thus we put their actual judgment on the fourth row column 4 of the matrix. Then based on the experts' preferences values, we have a reciprocal matrix like this:

Table 5: Example for pair-wise comparison matrix.

Financial instruments	<i>Mudaraba</i>	<i>Mushraka Daima</i>	<i>Mushraka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	1	1/2	1/3	5	6
<i>Mushraka Daima</i>		1	1/2	6	7
<i>Mushraka Mutanaqissa</i>			1	7	8
Mark-up products				1	2
Conventional Debt					1

To fill the lower triangular matrix, we use the reciprocal values of the upper diagonal. If a_{ij} is the element of row i column j of the matrix, then the lower diagonal is filled using this formula:

$$a_{ji} = \frac{1}{a_{ij}}$$

Thus the comparison matrix can be completed as shown in the following Table:

Financial instruments	<i>Mudaraba</i>	<i>Mushraka Daima</i>	<i>Mushraka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	1	1/2	1/3	5	6
<i>Mushraka Daima</i>	2	1	1/2	6	7
<i>Mushraka Mutanaqissa</i>	3	2	1	7	8
Mark-up products	1/5	1/6	1/7	1	2
Conventional Debt	1/6	1/7	1/8	1/2	1

After obtaining the comparison matrix, the next step is to compute priority vector which is the normalized Eigen vector of the matrix. Calculating the principal vector (or Eigen vector) consists of adding the members of each column to obtain the total. Then, each element of the matrix is divided with the sum of its column in order to normalize relative weight. The sum of each column is 1 or 100%. The normalized principal Eigen vector is obtained by averaging across the rows. We add the elements in each row and divide the sum by the number of elements in the row to get the average. The approximate priority weights obtained are: *mudaraba* (0.191), *musharaka daima* (0.282), *musharaka mutanaqissa* (0.433), mark-up (0.279) and conventional debt (0.038).

Table 6: Normalized matrix and calculation of priority weights

Financial instruments	Average	Row total	<i>Mudaraba</i>	<i>Musharaka Daima</i>	<i>Musharaka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	0.191	0.953	0.157	0.131	0.159	0.256	0.250
<i>Mushraka Daima</i>	0.282	1.413	0.314	0.262	0.238	0.307	0.292
<i>Musharaka Mutanaqissa</i>	0.433	2.164	0.471	0.525	0.476	0.359	0.333
Mark-up products	0.056	0.279	0.032	0.044	0.068	0.052	0.083
Conventional Debt	0.038	0.191	0.026	0.038	0.059	0.026	0.042
Sum	1		1	1	1	1	1

The AHP incorporates an effective technique for checking the consistency of the evaluations made by the experts when building the pair-wise comparison matrices. Indeed, AHP is the only multicriteria analysis method that provides such a technique to make sure that relative weights and priorities are not given randomly (Cheng et Li, 2001; Golden et al., 1989; Liberatore et Nydick, 1997; Aguaron et al., 2003; Partovi et Hopton, 1994; Madu et al., 1994). Hence, a consistency ratio (CR) for the pair-wise comparison matrices is calculated to determine the acceptance of the priority weighting. According to Saaty (1980), if

the CR is less than 0.10, then the pair-wise comparisons are consistent. In contrast, if the CR value > 0.10 , the amount of inconsistency is not acceptable. In this case, the decision makers need to revise the pair-wise comparison matrices involved in the process. In the current study, Expert Choice is used to calculate the CR. The soft ware program shows that the par-wise comparisons are reasonably consistent (Appendix 2).

5. Findings

According to the data collected and the results obtained using the Expert Choice software program, criteria are, first, prioritized, and then, financial instruments are rated and ranked with respect to each criterion. The results of the study will be discussed below.

Rating and Ranking the products with respect to their suitability to meet SMEs financial requirements

The five products were rated and ranked according to the three phase of the SME's life cycle: inception phase, growth phase and maturity phase. The Expert Choice software generated the following findings presented in the Table 7.

Table 7: Ratings and Rankings of the financial products with respect to their suitability in inception phase

Products	Inception phase		Growth phase		Maturity phase	
	Rating	Ranking	Rating	Ranking	Rating	Ranking
<i>Mudaraba</i>	0.162	3	0.164	3	0.238	3
<i>Musharaka Daima</i>	0.239	2	0.103	4	0.058	5
<i>Musharaka Mutanaqissa</i>	0.506	1	0.265	2	0.110	4
Mark-up Products	0.065	4	0.420	1	0.352	1
Conventional Debt	0.028	5	0.048	5	0.242	2

In Table 8 above, it is observed that PLS financing is more suitable for SMEs in inception phase. Mark-up products are ranked in second position, followed by conventional debt. Indeed, emerging SMEs are highly risk averse and do not have enough investment experience. Thus, PLS contracts allow them to benefit from financial institutions experience (the first priority goes to *musharaka mutanaqissa*, being the most suitable to the financial requirements of SMEs in inception phase, followed by *musharaka daima* and *mudaraba*).

During the growth phase, SMEs pursuit their growth strategies and become more familiar with risk. Thus, priority is given to mark-up products, then *musharaka mutanaqissa*, followed by *mudaraba*, then *musharaka daima* and finally conventional debt.

During the maturity phase, SMEs become very profitable. Therefore, more convenient conditions will be set for mark-up products and conventional debts. PLS financing represents an alternative, but less suitable in maturity phase. The first priority goes to mark-up products, the second to conventional debt, the third priority is given to *mudaraba*, followed by *musharaka mutanaqissa* and finally *musharaka daima*.

Rating and Ranking the financial products with respect to their costs

When the five products were rated according to their costs, the Expert Choice software generated the following findings shown in Table 8. The Table shows that PLS financing is more expensive than debt financing. In addition to investment risks, the use of PLS instruments exposes financial institutions to the asymmetric information risk and agency problems. It can be noted that mark-up products has the highest weight, being less costly, then conventional debt, followed by *musharaka mutanaqissa*, then *mudaraba* and finally, *musharaka daima*.

Table 8: Ratings and Rankings of the financial products with respect to their costs

Products	Rating	Ranking
<i>Mudaraba</i>	0.120	4
<i>Musharaka Daima</i>	0.072	5
<i>Musharaka Mutanaqissa</i>	0.205	3
Mark-up Products	0.346	1
Conventional Debt	0.257	2

Rating and Ranking the products with respect to financial risk

The output from Expert Choice software of the relative weights of the products according to their financial risk level is presented in Table 9 .

Table 9: Ratings and Rankings of the five products with respect to financial risk

Products	Rating	Ranking
<i>Mudaraba</i>	0.401	1
<i>Musharaka Daima</i>	0.298	2
<i>Musharaka Mutanaqissa</i>	0.227	3
Mark-up Products	0.046	4
Conventional Debt	0.028	5

PLS financing allows risk sharing between SMEs and financial institutions. In contrast, debt financing concentrates the financial risk on the SME. Therefore, PLS financing is ranked first as least risky for SMEs, with *mudaraba* ranked ahead of *musharaka daima* and *musharaka mutanaqissa*. Mark-up products are ranked fourth and conventional debt at the bottom of the ranking.

Rating and Ranking the financial products with respect to collateral requirements

The software program rated the five financing methods with respect to their collateral requirements. These ratings are shown in Table 10.

Table 10: Ratings and Rankings of the financial products with respect to their collateral requirements

Products	Rating	Ranking
<i>Mudaraba</i>	0.224	3
<i>Musharaka Daima</i>	0.352	1
<i>Musharaka Mutanaqissa</i>	0.352	1
Mark-up Products	0.041	4
Conventional Debt	0.031	5

Pricing and collateral conditions are the biggest obstacles for SMEs to overcome. These barriers are greater under Basel III regulatory rules. In response to Basel III, conventional banks demand additional security. Therefore, smaller and younger businesses, which are less able to provide collateral and guarantees, would face more barriers to access to conventional debt (ACCA, 2011). Hence, the data tabulated in Table 10 show that priorities are given to PLS financing, requiring less collateral, with *musharaka* products ranked ahead of *mudaraba*. Indeed, in Islamic law, physical collateral cannot be

required to guarantee the profit of any financial institutions. Thus, mark-up products are ranked fourth followed by conventional debt.

Rating and Ranking the financial products with respect to the financial institution management intervention

According to the impact of the financial products on the SME's control, the experts' priorities are presented in Table 11.

Table 11: Ratings and Rankings of the financial products with respect to the financial institution management intervention

Products	Rating	Ranking
<i>Mudaraba</i>	0.233	3
<i>Musharaka Daima</i>	0.059	5
<i>Musharaka Mutanaqissa</i>	0.092	4
Mark-up Products	0.308	1
Conventional Debt	0.308	1

As shown in Table 11, the experts give priority to mark-up products and conventional debt since these two products do not require any business intervention. Using PLS financing, SMEs allow management intervention of the financing institution, disclosure of financial records and increase in the number of business partners. Hence, PLS products represent risk of losing control, except *mudaraba*. Indeed, this financial instrument contract does not allow any intervention in the management. Thus, *mudaraba* is ranked third, followed by *musharaka mutanaqissa* and then *musharaka daima*. The ranking is also supported by the Pecking Order Theory (Myers and Majluf, 1984).

Rating and Ranking the financial products with respect to their impact on SME's profitability

The five products were rated according to their profitability. Expert Choice software generated the following ratings shown in Table 12.

Table 12: Ratings and Rankings of the financial products with respect to their impact on the SME's profitability

Products	Rating	Ranking
<i>Mudaraba</i>	0.191	3
<i>Musharaka Daima</i>	0.282	2
<i>Musharaka Mutanaqissa</i>	0.433	1
Mark-up Products	0.056	4
Conventional Debt	0.038	5

In terms of profitability, the PLS is prioritized. In spite of the fact that PLS financing is more expensive, it generates a higher rate of return for SMEs in comparison to other financing sources. Through PLS contracts, especially those based on *musharaka*, SMEs benefit from financial institutions business support, which has a *positive influence on profitability*. Hence, the highest rate goes to *musharaka mutanaqissa*, then *musharaka daima*, followed by *mudaraba*, then mark-up products and finally, conventional debt. From the perspective of banks, the SMEs sector is characterized by a significant potential for profitability and good prospects, and represents a strategic profitable part of a bank's business (Beck, Demirgüç-Kunt and Martinez, 2008). Keasey and McGuinness (1990) argue that SMEs employ the funds more efficiently when they are monitored by the bank. Therefore, the *monitoring* process associated with the PLS can help SMEs accomplish better performance levels than the other financial products, which make bank-SME relationship profitable to both parties.

Global Weight

The general rating is calculated considering the weight of each criterion (Table 13). The outputs generated from Expert Choice software of the global weights of the five financing methods are presented in Table 14.

Table 13: Ratings and Rankings of the criteria

Criteria	Rating	Ranking
Suitability	0.264	1
Cost	0.190	3
Collateral requirements	0.129	4
Risk	0.067	6
Management intervention	0.085	5
Profitability	0.264	1

According to the experts, suitability and profitability are the most important criteria that should be considered while prioritizing the financial products, followed by cost then collateral requirements.

Table 14: Ratings and Rankings of the financial products

Products	Rating	Ranking
<i>Mudaraba</i>	0.199	3
<i>Musharaka Daima</i>	0.209	2
<i>Musharaka Mutanaqissa</i>	0.291	1
Mark-up Products	0.171	4
Conventional Debt	0.130	5

As shown in the table above, the experts have ranked PLS financing higher than debt financing in terms of being more convenient to SMEs. *Musharaka mutanaqissa* is ranked first, then *musharaka daima*, followed by *mudaraba*, then mark-up products and finally conventional debt. *Musharaka mutanaqissa* is, hence, the most appropriate financial product to SMEs.

Before concluding this paper, it is important to note that the current study has specifically examined the factors that influence SMEs financial decisions from the perspective of some experts, and then, proceeded to prioritize financial products with respect to the entrepreneurs' perceived point of view. However, it is crucial to examine the financial institutions perspective in order to identify other factors, especially, those associated with asymmetric information problems that characterize PLS contracts. Indeed, moral hazard hypothesis is the dominant explanation for the lack of PLS in Islamic banking (Khan, 1995). Ahmed (2014) highlights that the choice of financial products used by Islamic financial institutions depends on both internal and external factors. The author argues that "*In some cases Islamic banks choose controversial modes of financing as these are the only ones that are feasible under the legal and regulatory regimes they operate under*". By taking these considerations into account, the establishment of priorities from the perspective of financial institutions might differ.

6. Conclusion

Financing an SME is a complex decision requiring significant evaluation of alternatives. In achieving its objectives, this study provides a significant contribution to the previous literature. The first objective of the work was the identification of the important criteria for financial product selection process. The most important are profitability and suitability, followed by cost as shown in Table 7. The second objective was a development of a multi-criteria decision model for evaluation and selection a financial product for SMEs, by using the AHP method as illustrated in Figure 1.

The results of the AHP developed model show that *musharaka mutanaqissa* is a highly accepted product in terms of conforming the SMEs' profile. The study also finds that the experts have not totally rejected the other financial products. Their importance degrees change according to the criteria and the SME development stage.

For the future direction of the study, some points need to be observed. The model needs to be modified considering other criteria as the financial institutions performance and the quality of their services. In addition, other financial products need to be compared to have a global view on the financial market products. The process of data collection using AHP refers to financial consultants and university professors. However, selecting a financial product is actually based on the SMEs managers because of their personal satisfaction, their religious beliefs and their awareness which plays a significant role to explain their attitude toward Islamic banking (Ould Mohamed Mahmoud and Abduh, 2014). Thus, the prioritization of the criteria may be different.

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Appendix 1: Profiles of the respondents

	Gender	Academic qualification	Position	Number of years of experience	Number of publications in Islamic banking and finance	Country
1	M	Master	Financial consultant	5-10	< 10	Morocco
2	M	PhD	University professor	31-40	> 40	Morocco
3	M	PhD	Financial consultant and university professor	31-40	21-30	Morocco
4	M	PhD	Financial consultant and university professor	10-20	10-20	Malaysia
5	M	PhD	University professor	21-30	31-40	Malaysia
6	F	PhD	University professor	21-30	21-30	Malaysia
7	M	Master	Financial consultant	5-10	< 10	Malaysia
8	M	PhD	Financial consultant	31-40	10-20	Morocco
9	M	Master	University professor	31-40	31-40	Pakistan
10	M	Master	Financial consultant	10-20	< 10	Morocco
11	M	PhD	Financial consultant	21-30	< 10	Kuwait
12	M	Master	Financial consultant	21-30	10-20	Senegal
13	M	Master	Chief Research Officer	10-20	10-20	USA
14	M	Master	University professor	21-30	21-30	Nigeria
15	M	Master	Financial consultant	21-30	< 10	Bahrain
16	M	Master	Financial consultant	10-20	< 10	Malaysia
17	F	PhD	University professor	21-30	10-20	Malaysia
18	M	PhD	University professor	10-20	21-30	Qatar
19	M	Master	Financial consultant and university professor	> 40	> 40	Pakistan

Appendix 2: The pair-wise comparison matrices

Table 15: The pair-wise comparison matrix of the criteria

Criteria	Risk	Suitability	Cost	Collateral requirements	Management intervention	Profitability
Risk	1	1/3	1/3	1/2	1/2	1/3
Suitability		1	2	2	3	1
Cost			1	2	3	1/2
Collateral requirements				1	2	1/2
Management intervention					1	1/3
Profitability						1

Inconsistency= 0.02

Table 16: The pair-wise comparison matrix related to the financial instruments suitability during the inception phase

Financial instruments	<i>Mudaraba</i>	<i>Musharaka Daima</i>	<i>Musharaka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	1	1/2	1/4	4	7
<i>Musharaka Daima</i>		1	1/3	5	8
<i>Musharaka Mutanaqissa</i>			1	9	9
Mark-up products				1	5
Conventional Debt					1

Inconsistency= 0.08

Table 17: The pair-wise comparison matrix related to the financial instruments suitability during the growth phase

Financial instruments	<i>Mudaraba</i>	<i>Musharaka Daima</i>	<i>Musharaka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	1	2	1/2	1/3	4
<i>Musharaka Daima</i>		1	1/3	1/4	3
<i>Musharaka Mutanaqissa</i>			1	1/2	5
Mark-up products				1	6
Conventional Debt					1

Inconsistency= 0.02

Table 18: The pair-wise comparison matrix related to the financial instruments suitability during the maturity phase

Financial instruments	<i>Mudaraba</i>	<i>Musharaka Daima</i>	<i>Musharaka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	1	5	4	1/2	1/2
<i>Musharaka Daima</i>		1	1/3	1/4	1/3
<i>Musharaka Mutanaqissa</i>			1	1/3	1/2
Mark-up products				1	2
Conventional Debt					1

Inconsistency= 0.07

Table 19: The pair-wise comparison matrix related to the financial instruments cost

Financial instruments	<i>Mudaraba</i>	<i>Musharaka Daima</i>	<i>Musharaka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	1	2	1/3	1/3	1/2
<i>Musharaka Daima</i>		1	1/3	1/4	1/3
<i>Musharaka Mutanaqissa</i>			1	1/2	1/2
Mark-up products				1	2
Conventional Debt					1

Inconsistency= 0.03

Table 20: The pair-wise comparison matrix related to the financial instruments risk

Financial instruments	<i>Mudaraba</i>	<i>Musharaka Daima</i>	<i>Musharaka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	1	2	2	9	9
<i>Musharaka Daima</i>		1	2	8	9
<i>Musharaka Mutanaqissa</i>			1	8	9
Mark-up products				1	3
Conventional Debt					1

Inconsistency= 0.06

Table 21: The pair-wise comparison matrix related to the financial instruments collateral requirements

Financial instruments	<i>Mudaraba</i>	<i>Musharaka Daima</i>	<i>Musharaka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	1	1/2	1/2	8	8
<i>Musharaka Daima</i>		1	1	9	9
<i>Musharaka Mutanaqissa</i>			1	9	9
Mark-up products				1	2
Conventional Debt					1

Inconsistency= 0.03

Table 22: The pair-wise comparison matrix related to the financial institution management intervention

Financial instruments	<i>Mudaraba</i>	<i>Musharaka Daima</i>	<i>Musharaka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	1	5	4	1/2	1/2
<i>Musharaka Daima</i>		1	1/2	1/4	1/4
<i>Musharaka Mutanaqissa</i>			1	1/3	1/3
Mark-up products				1	1
Conventional Debt					1

Inconsistency= 0.04

Table 23: The pair-wise comparison matrix related to the financial instruments profitability

Financial instruments	<i>Mudaraba</i>	<i>Musharaka Daima</i>	<i>Musharaka Mutanaqissa</i>	Mark-up products	Conventional Debt
<i>Mudaraba</i>	1	1/2	1/3	5	6
<i>Musharaka Daima</i>		1	1/2	6	7
<i>Musharaka Mutanaqissa</i>			1	7	8
Mark-up products				1	2
Conventional Debt					1

Inconsistency= 0.03