Value Analysis of Islamic Banking and Conventional Banking to Measure Value Co-Creation

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Abstract—This study examines the value analysis in Islamic and conventional banking services in Pakistan. Many scholars have focused on co-creation of values in services but mainly economic values not non-economic.

As Islamic banking is based on Islamic principles that are more concerned with non-economic values (well-being, partnership, fairness, trust worthy, and justice) than economic values as money in terms of interest. This study is important to know the providers point of view about the co-created values, because, it may be more sustainable and appropriate for today’s unpredictable socio-economic environment.

Data were collected from 4 banks (2 Islamic and 2 conventional banks). Text mining technique is applied for data analysis, and values with 100% occurrences in Islamic banking are chosen. The results reflect that Islamic banking is more centric towards non-economic values than economic values and it promotes team work and partnership concept by applying Islamic spirit and trust worthiness concept.

Keywords—Economic values, Islamic banking, Non-economic values, Value system.

I. INTRODUCTION

BANKS play an important role in the economic development and wellbeing of any society in any country [1]. Enlightening human well-being is becoming a debatable challenge with the passage of time [2]. There are lot of factors that concern about the well-being of either individuals or communities that includes poverty, unemployment, natural disasters and numerous factors [2]. There are two banking systems that exist in Pakistan named as Islamic banking and a dominant conventional banking. This study examines the economic and non-economic dimension of Islamic banking sector, comparison of co-created values in Islamic banking and conventional banking system and also the economic and non-economic perspective of values with respect to provider’s point of view. For the better analysis first it is essential to understand the terms “conventional banking, Islamic banking, and value system”.

The Islamic banking system is based on the principles of Islamic law (also known as Sharia) and guided by Islamic economics [1]. The Islamic banks conduct their activities in accordance with the principles of Islam [3].

Conventional banking is grounded on a pure financial model, in which the bank and the customer act as debtor or creditor. This banking system follows the theory of capitalism with the purpose of profit maximization [1], [4], [5]. Islamic banking and conventional banking are differentiated only on the basis of rules and regulations, therefore Islamic banks show a healthy competition with conventional banks for value co-creation regarding with economic or non-economic values.

Value system refers to the terms of values including economic (monetary) and non-economic (non-monetary) values. As Islamic banking is generally based on a business relationship and partnership approach, such approaches are now acquiring popularity and propose those involved in service exchange, the opportunity to co-create values or at least mutual benefit and this is one of the signs for economy that Islamic banks are on the horizon of improving trends every year [1]. In every transaction normally Islamic bank acts as an intermediary [6]. This study will depict that Islamic banking is essentially a value co-creation business model that promotes non-economic values used for the betterment of the society, and this is judged by analyzing the press release data of 4 banks (2 Islamic and 2 conventional banks) by using text mining techniques.

In this study, first of all we review the literature for conceptualization of mechanism of Islamic banking products and value co-creation in Islamic and conventional banking. Secondly, we design a value co-creation model for Islamic and conventional banking sector. Thirdly, we demonstrate the model by collecting the press release data of 4 banks (2 Islamic and 2 conventional banks in Pakistan). Furthermore, we analyze the data by using text mining technique to prove the model true. Finally, we explain the unique characteristics of Islamic and conventional banking and we concluded that Islamic banking promotes Islamic spirit, sharing and team work concept between the provider and the customer for the well-being of the community.

This paper is structured into 7 sections. Section II presents a pictorial overview of economic dimension of Islamic banking system. Section III is about non-economic dimension of Islamic banking. Section IV explains the co-creation of non economic values in Islamic banking. What do these values mean and how these can be proved true is discussed in Section V. The analysis and discussion to explain the main results of the application are shown in Section VI. Finally the concluding remarks are mentioned in Section VII.

II. ECONOMIC DIMENSIONS OF ISLAMIC BANKING

There are several most prevalent financing structures found
in Shariah-compliant transactions that directly relate to the economic value accompanied with the non-economic values. The economic values relate to the market and retrieved price of products/services such as profit, service charges, opportunity cost and mark up as well. However the non-economic or social values are the principles or quality control standards to regulate human activities such as partnership, justice and uniformity as well. These structures are: Musharakah, Mudarabah, Murabaha, Ijarah, Istisna, Bai Salam.

A. Musharakah (Partnership) (Joint Venture)

Musharakah is an Arabic word that means sharing, it is an association established under a contract by the mutual consent of the parties for sharing of profits and losses in the joint business [6]. It can play a significant role in the economy based on Islamic codes. It is an agreement under which the Islamic bank provides funds, which are mixed with the funds of the business enterprise and others [7]. All providers of capital are entitled to participate in management, but not necessarily required to do so. The profit is divided among the partners in pre-decided ratios, while the loss is tolerated by each partner strictly in proportion to individual capital contributions [8]. This contract is prepared with free consensus of the parties without any deception and falsification [9].

From Fig. 1, it is clear that Musharakah structure works best when a number of partners are involved. From the financier’s point of view this structure is preferable because all the partners are providing a share of capital and expertise and make a joint investment either in a project or an enterprise. Profits are shared between the partners according to the pre-decided ratio; however losses are distributed in proportion to the individual capital contribution among the partners. Fig. 1 shows the Musharakah transaction and explains how it works.

B. Mudarabah (Profit Sharing) (Investment Management)

Mudarabah is a form of partnership whereby expertise and capital brought together to conduct business [10]. In this mode of financing, one party provides the funds known as rabb-ul-maal, while the other provides expertise and management known as mudarib, who employs those funds either to setup a new business or expand an existing business with an objective to make profit [11], [12]. Any profits accrued are shared between the two parties on a pre-determined ratio [8] while loss is borne only by the provider of the capital [6], [10], [11].

In this transaction the investor supplies the funds (capital) to the bank, and then bank invests funds in assets or in some projects, from project the business may generate profit or loss. The amount of profit is shared between the investor and the bank according to the pre-determined ratio; however the amount of loss will be borne by the investor only. The bank will share the loss as well, only in the case when there is some negligence on the part of the bank. That is the reason this transaction is considered as a profit sharing mode. Fig. 2 illustrates the mechanism of Mudarabah transaction in detail.

C. Murabaha (Cost plus Financing)

Murabaha is a cost-plus sale contract whereby exposé of cost to the buyer is essential [10]. Literally it means a sale on jointly decided profit. It is a contract of sale in which the seller states his cost and profit [11], [8].

Islamic banks have implemented this as a mode of financing. As a financing practice, it involves a request by the customer to the bank to purchase certain goods for him. The bank does that for a certain profit over the cost, which is specified in advance. Recovery could be agreed in installments or full payment [7], [12]. Any amount of penalty during the transaction cannot be included in the income of the Islamic banks; it must be consumed for charity [9]. The amount of installments or purchase price of the asset cannot be increased or decreased in case of default or early payment [10]. And the title of ownership of the subject matter remains with the bank until all the money is paid to the bank [13].

In Fig. 3 it is depicted that under Murabaha procedure first customer makes an agreement with the Islamic bank and requests to the Islamic bank to purchase an asset for him and sell on deferred payment. A vital feature of Murabaha is that
Islamic bank makes an immediate payment for the required commodity from supplier first and acquires the subject matter and then sell to the customer (see Fig. 3). The bank charges a certain profit in the form of mark up, usually related with interbank offered rate. In doing so, the customer can buy something without taking an interest based loan [12]. Fig. 3 illustrates the whole mechanism and working of Murabaha transaction.

Fig. 3 Murabaha transaction

D. Ijarah (Leasing)

Ijarah is a contract by which the bank buys an asset and leases it to the customer for fixed monthly payments [10], [12]. All the expenses related to the use of asset are borne by the customers however ownership risks are the responsibility of the Islamic banks [10]. Consumables cannot be leased out like food, fuel and money as well [10]. It is a contract of a known and projected usufruct against a definite and lawful return or concern for the service or return for the benefit projected to be taken, or for the effort or work projected to be finished. In other words, Ijarah or leasing is the transfer of usufruct for a consideration which is rent in case of hiring of assets or things and wage in case of hiring of persons [7].

Fig. 4 Ijarah Transaction

E. Istisna (Advance Funding)

A contract that states an agreement to sell to a customer a nonexistent asset, which is to be manufactured according to the customers’ requests at a definite price and for a fixed date of delivery [10]. It is a contractual agreement for manufacturing goods and commodities, agreeing cash payment in advance and future delivery. Istisna can be used for providing the facility of financing the manufacture or construction of long term projects like houses, plants, projects and building of bridges, ship or aircraft, roads and highways.

Fig. 5 illustrates that the bank and customer make an agreement in which customer explains his requirements of products. After that another contract establishes between the bank and the manufacturer. The bank acts as financier and funds the manufacturer, acquires title to the asset upon completion and, typically immediately passes this title to the purchaser on agreed deferred payment terms or a leasing agreement and finally sale the developed equipment to the customer. The financier must bear ownership risk in this transaction. In Fig. 5 we can see the flow of procedure in detail.

Fig. 5 Istisna transaction

F. Bai Salam

It is a sale contract where the seller agrees to supply goods to the buyer at future date in exchange of an advanced full payment at spot [9]. This type of sale is basically used in financing of agriculture to fulfill the needs of the small farmers, who need money to grow the crops and to manage their families as well [10].
In Fig. 6 it is shown that the Islamic bank acts as a financier and enters into a contract with the seller and later on with the buyer as well, and then makes a full payment at spot to the seller to acquire the title of the goods and receives the goods in future. After that the bank delivers the goods to the buyer and receives the purchase price that is normally higher than the payment made at spot to the seller. Fig. 6 clearly depicts the procedure of the Salam transaction in detail.

III. NON-ECONOMIC DIMENSIONS OF ISLAMIC BANKING

As Islamic banks are based on religious foundations, so they have to follow sharia and the objective of sharia is to promote the well-being of all mankind. Islamic banks are likely to represent a high level of social responsibility [14].

Making profit from business is acceptable in Islam, but the use of profit not for the progress of the community is prohibited [15].

Islamic banks pay more attention towards the need of the society and the needy or poor families, and encourage social activities for human welfare [14].

Islamic banks play an important role in economic restoration and social justice. They contribute a lot to fulfill the consumption needs, to promote productive activities and help in capacity building activities by the management of zakat, charity, benevolent loans, lease and some sale contracts like Salam [16]. Because of this reason, while making investments Islamic banks give priority to those areas that aid in solving the problems of the society, and for this sometimes they have to loss their own business profit as well [17].

In Fig. 7, we can see the mechanism of social activities in Islamic banking. There are two main sources for mobilizing funds like internal or external sources. Islamic banks act as supporting firms and manage the funds from different sources on behalf of the NPO (Not for profit organization) and NGO (Non-Governmental organization), these organizations are normally considered as SPV (Special purpose vehicle), they further distribute the funds for different customs mentioned in Fig. 7 as Consumption needs (food, clothes, education), Productive activities (shelter, equipment, Rental), Capacity building activities (interest free loans). Refer to the Fig. 7 for the overview of the whole process.

IV. VALUE CO-CREATION IN ISLAMIC BANKING AND CONVENTIONAL BANKING

In Sections II and III we have a detailed description of the economic dimension that includes Musharakah (Fig. 1), Mudarabah (Fig. 2), Murabaha (Fig. 3), Ijarah (Fig. 4), Istisna (Fig. 5), Bai Salam (Fig. 6), and non–economic dimension comprises of social activities (Fig. 7) of the growing banking system (Islamic banking). The common part in the two dimensions (economic and non-economic) is that Islamic bank plays an intermediary role, which promotes teamwork and partnership aspect of the transaction. This research focuses on the relation of the bank, the customer and the rest of the value chain to co-create values in economic and non-economic dimensions, finally to create non-economic values that are essentially in services.

There is a detailed comparison of the traditional banking system (conventional banking) with the growing banking system (Islamic banking) [18]. The two have the different grounds but still they exist altogether. Here we have chosen the major point of difference that is deposit and loan case, which promotes teamwork and sharing concept among the provider
and the customers [10], [19].

Fig. 8 (a) depicts the deposit case in conventional banking; the whole mechanism to carry out this activity is based on profit in terms of interest. The conventional banking system is more concerned with the economic values that include profit and interest [19]. Here in this case co-creation occurs between the customer and the bank, first the customers have some expectations to receive a fixed amount of money in terms of profit, so they go to the bank and offer some amount of money to make deposit as per their expectations. The bank makes investment of that money in a project or enterprise and receives some profit; the fixed amount of this profit goes to the customer. And if the bank suffers loss, the customers do not involve in the loss, the whole loss or risk transfers towards the bank as shown in Fig. 8 (a), where only a fixed portion of the loss could be covered by the insurance company but the remaining loss moves towards the bank.

In the deposit case, co-creation process in an Islamic banking is shown in Fig. 8 (c) is the same as a conventional banking shown in Fig. (a). The customer visits the Islamic bank with some expectations to make deposit and earns profit.

In the case of a loan the customers contact the conventional bank and ask for loan to make further investment, and the bank has no concern with the viability of the project [10], [19]. As the customers invest by themselves so the bank only receives a fixed amount of profit and whole risk or loss bears by the customer as in Fig. 8 (b), where a fixed amount of loss could be covered by the insurance company but the remaining loss moves towards the customer. In both cases the relationship between the bank and the customer is always as debtor or creditor [1], [19].

In contrast, there is an Islamic banking system, where the impression of partnership (Fig. 1) occurs in most of the dealings. In this banking system both deposit and loan cases follow the same principle of sharing profit and loss [9], [10].

Islamic bank makes further investment of the deposited money in some project or enterprise. The case is different, from the economic value case that the bank earns either profit or loss, it is shared between both parties with the profit or loss, they furthermore co-create the non-economic values in the form of cooperation, fairness, justice, teamwork and well-being of the individual, and a fixed amount of profit goes to the Non-Governmental Organizations (NGO) and not for Profit Organizations (NPO), which ultimately leads towards the well-being of the whole society. Therefore Islamic banks also considered as the welfare organizations and it is more careful towards customer centric approach.

![Value Co-creation process](image-url)
There is a similar process for a loan as well; when the customer asks for a loan from Islamic banks then the right is not fully transmitted towards the customer to make an investment. The bank plays an intermediary role, and they make a mutual investment according to the Islamic law. And this is the specialty of the bank that makes it different from regular banking system (conventional banking).

By this exploration, this study tries to depict the value system and a theory is derived from the literature survey that explains the value co-creation process and co-created values in Islamic banking and conventional banking. Islamic banking has noticed the change towards a sharing and partnership paradigm and it has become the success factor of the Islamic banking sector.

There are two types of values created in the Islamic banking sector, economic and non-economic values. By comparing the Islamic banking and conventional banking it is clear that non-economic values are playing a major role as drivers of operations in Islamic banking.

The left part of Fig. 8 explains value co-creation process, and the right part of Fig. 8 shows co-created values in both conventional (economic values) and Islamic banking (economic and non-economic values).

V. RESEARCH METHODOLOGY

From section II and III, it is observed that in economic and non-economic dimensions, Islamic banks play the role of intermediary to promote cooperation and team work between provider and the customer. On the basis of existing literature, this study examined the co-creation of economic and non-economic values in Islamic banking that also shows the co-creation of bank and customer by taking the deposit and loan cases. This study also depicted an overall co-creation model in the section IV to represent the whole phenomenon about value co-creation to explain team work and related activities between provider and the customer.

To prove the co-creation model developed in Section IV, an empirical research is conducted that is basically for establishing a link between the literature survey and evidence collected from press releases. For this purpose text mining technique is chosen by using SPSS text mining tool. Press releases from 4 banks are selected as input data for the software, because press releases are strongly related to the characteristics of banking activities and values generated. The core objective of this research can be expressed as to assess team work or sharing experiences among the banks and the customers. The 4 targeted banks selected for this research are (2 Islamic and 2 conventional banks) named as: Meezan Bank Limited, Albaraka Bank, National Bank of Pakistan, and Faysal Bank Limited.

Firstly, this research is done by dividing the press release data into different values or words by using SPSS text analysis tool. Secondly, we make the dictionary of economic and non-economic values by reviewing the words extracted from software and also by checking them with many research papers on financial and social perspectives of banking sectors. Thirdly, we input the dictionary into the software and by visualization the results we shorten the dictionary. Then we select those values which showed 100% occurrences in Islamic banking and checked whether they are economic or non-economic. Similarly we select those values which showed 100% occurrences in conventional banking and checked them. And finally form a structure to show the unique characteristics in Islamic and conventional banking.

VI. ANALYSIS AND DISCUSSIONS

The main objective of the study is to confirm the co-creation model (Fig. 8), and to explore the non-economic perspective of Islamic banking sector.

A. Detailed Strategy

Data were collected from the press releases published on the websites of 4 banks working in Pakistan (2 Islamic banks and 2 conventional banks) for the years 2007-2013 and we got 478 press releases from all 4 banks. The data were analyzed as follows:

Firstly the data were organized and entered into SPSS text mining tool and we got 8,000 words. We observed 116 financial values, 433 social values and 7451 other words. Secondly we developed the dictionary by analyzing the papers about economic, financial and social science aspects of the banking sector explaining all the economic and non-economic values and terms related to Islamic and conventional banking, here we got 192 values after detailed analysis of the terms by using research papers. Thirdly, we divided the press release data from different banks by using the developed dictionary and divided the data into three main groups, 100% occurrences in Islamic banking, 100% occurrences in conventional banking, and the others. Finally, we compared the values and observed the unique characteristics of Islamic and conventional banking based on economic and non-economic values.

B. Target Banks

This section aims to verify the co-creation model developed for Islamic and conventional banking (Fig. 8). By observing the press release data we can know the providers point of view about the co-created economic and non-economic values.

The biggest Islamic banking system, Meezan bank limited was selected to conduct our study. The selection of this bank was mainly owed to its main features, as this bank was the first Islamic bank to start its business in Pakistan and one of the fastest growing banks in the history of the banking sector of the country. Having the largest branch network and product range, Meezan Bank targets to fulfill its key objectives of providing customers availability and convenience [20].

The other selected Islamic bank is alBaraka bank which is a leading international Islamic bank providing its distinctive services to about one billion people. The group has a widespread geographical presence in the form of subsidiary banking divisions and representative offices in fifteen countries [21].

Contrary, we had selected two conventional banks; one was National bank of Pakistan that is one of the largest commercial bank operating in Pakistan. It has revised its role and has moved from a public sector organization into a modern commercial bank. The Bank's services are available to individuals,
corporate entities and government. While it continues to act as trustee of public funds and as the agent to the State Bank of Pakistan, in places where SBP (State bank of Pakistan) does not have presence [22].

The other conventional bank was Faysal bank limited; it is engaged in corporate, commercial, retail and Islamic Banking activities [23]. The mentioned 4 banks are performing well in Pakistan.

C. Making Dictionary from Papers

We made a dictionary of economic and non-economic values by reviewing the words extracted from software and also by checking them with many research papers on financial and social perspectives of banking sectors. Data were collected from the research papers to establish our own dictionary for SPSS text mining tool.

For this purpose economical and non-economical papers were studied to classify each word as economic (monetary) or non-economic (non-monetary) precisely. The economical papers covered financial, marketing and business related papers. However, the non-economical papers were totally about business values, social activities and values, or working environment related papers in banking sector.

D. Dividing the Press Release by Dictionary

By observing the dictionary press release data were divided as per the dictionary and we found that the 100% occurrences in conventional banking were 16 words and all economic values (Fig. 9) and the 100% occurrences in Islamic banking were 81 words and all non-economic values (Fig. 10). The rest were 95 words which appeared both in Islamic and conventional banking.”

E. Making Groups of Different Values

We divided all the values of the 100% occurrences in conventional banking into 4 groups (financial terms, funds, transaction fee and paper money) with respect to similarity in functions and nature and explains the number of words included in each group like financial terms (5 words), funds (5 words), transaction fee (4 words), and paper money (2 words). The details are as follows:

Paper money: (Draft, Receipt), Transaction Fee: (Cost, Mark Up, Profit, Service Charge), Funds: (Allowance, Income Tax, Pension, Remittance, Salary), Financial Terms: (Advances, Cash flow, Equity, Capital Expense, Loans).

Fig. 9 shows the overall percentages of the groups and also the number of words included in each group.

2 words

5 words

Finanical terms

Funds

Transaction fee

Paper money

4 words

31.25

12.5

25

5 words

Fig. 9 Unique values in conventional banking

We divided all the values of the 100% occurrences in in Islamic banking into 4 groups (team work, practicability, trust worthy, and spirit) based on similarity in nature and we listed the number of words included in each group as team work (11 words), practicability (36 words), trust worthy (15 words) and finally spirit (6 words). The details are as follows:


These all non-economic words are strongly referred to the Islamic banking system by observing press release data, so, basically used in Meezan bank limited and alBaraka bank in Pakistan. Fig. 10 shows the overall percentages of the groups and also the number of words in each group.

Fig. 10 Unique values in Islamic banking

A group that includes both values for both banks contains further values as:

Payments, Cash, Cost, Revenues, Loan, Interest, Participate, Assist, Promotion, Convenience, Expansion, Beneficial,
The findings of this study highlighted different aspects in banking sector that provides valuable information about values co-created in Islamic banking and conventional banking and relation of the customers with the banks that makes the basis of the unique characteristics. This research is mainly about to collect the evidence in the form of press release data and then to analyze the press release data by using text mining technique. From the analysis we derived three groups of values, a group of economic values, strongly related to conventional banking, a group of non-economic values majorly related to Islamic banking and a group of economic and non-economic values related to both banking, but the main focus of this research is to make clear the unique characteristics of Islamic banking and conventional banking.

The core objective of this research can be expressed as to assess team work or sharing experiences among the banks and the customers that is expected as a growing trend in the business world.

Firstly, it is a great opportunity to broaden the view of value co-creation with respect to non-economic values. As per the case of Islamic banking not only economic values but also the non-economic values are co-created. This research denotes an innovative area in both customer and service research that can subsidize to understand and reduce the stimulating problems
fronting today’s society. By focusing on this area, we hope that it will be a promoter for additional service research dedicated to the problems related to customer’s well-being.

Secondly, this study serves as a promoter of non-economic values like team work, spirit, and trust worthiness. It depicts the real picture of practicability in Islamic banking that can attract more customers and can become a significant factor to compete the conventional banking system.

Finally, this study can explain the clear picture of economic and non-economic dimensions of Islamic banking which shows that in this banking sector all economic activities are based on non-economic values that focus on the well-being of mankind. In this study, we have analyzed the press release data by using text mining technique, just to prove that Islamic banking is more centric towards non-economic values than economic values.

In this paper, 100% economic and non-economic value occurrences are researched, but occurrences of both values are not researched yet, as a future work this research would be expanded for both occurrences as well. Firstly, in future we would concentrate on the real occurrences of the words, to know that in what context the words are used in the press releases. For this purpose a detailed analysis is necessary to make sure about the real meaning of the words.

Secondly, in this analysis we could not find commonalities between Islamic and conventional banking because it’s just a word analysis that shows unique characteristics of Islamic and conventional banking, so, by analyzing both values in conventional and Islamic banking, we could find some commonalities that would be helpful to analyze the use of different words in different ways.

Thirdly, this research shows the providers point of view, but on the basis of this research we can expand the research to know the customers point of view as well by using some other data like (magazines, articles and advertisements etc.), to compare the both views.

REFERENCES


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