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The Performance Comparison of the Participation Banks Acting In Turkey Grey Relations Analysis Method

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ABSTRACT:"Participation Banks" are the final review of banking sector that have become indispensable for economy of countries. Although participation banks do not have a long history, they were included to the Bank Law in 2005 and these banks are getting more attention day by day. Since participation Banks are showed as alternative for traditional banks, the performance comparisons of participation banks is important for managers and investors. The purpose of this study is to compare the performances of the participation banks operating in Turkey via Grey Relational Analysis Method. In order to do this, 15 ratios which show the capital adequacy, liquidity, asset quality and profitability criteria years have been determined by using 4 year-data of the participation banks during the years between 2010 – 2013. Participation banks' performances have been compared with the result of the analysis with the help of determined ratios. The rank obtained from the result of the analysis is; Kuveyt Türk Participation Bank, Türkiye Finans Participation Bank, Albaraka Türk Participation Bank and Asya Participation Bank. At the end of the study, capital adequacy has been determined as the dominant ratio among all the ratios which affect the performances of participation banks.

Key Words: Participation Banks, Grey Relation Analysis, Performance Analysis, Capital Proficiency Ratios, Financial Performance.

JEL classification: G14, C67

1. Introduction

There is scarcely any market affected by the terms, such as "globalizing world" and "global economy". In the changing and developing world, banking system has grown into a market where competition has reached peak and customer satisfaction is prioritized. Intermediary, which is the first definition coming to mind about banks and where fund-demanding and fund-offering meet, remains quite simple. These intermediaries have included many alternative transactions as well as providing loan facilities and adding values to money in the account day by day. Banks are grouped as public banks, private banks, foreign banks, development banks, participation banks etc. Participation bank is the last one that has been added to this group.

Participation banks are the banks which collect funds on the basis of participation in the profits and losses as deemed appropriate basically by Islamic rules and distributing these funds on the basis of commercial relationship and partnership instead of providing them as credit, and where other Islamic-approved banking transactions are made [Turkmenoglu 2007]. These banks, which are known as interest free banks in the international literature, are referred as participation banks in our country which means that it is based on the participation in both the profit and loss.

Participation banks, which have a different working system than traditional banks, are seen as an alternative to traditional banks. Participation banks that are based on Islamic rules allow the entrance of certain idle funds into the system. Considering that these banks pay taxes according to the legal liabilities on this idle fund, they also contribute to the public revenues.

When examining the studies on the participation banks, performance and financial ratios comparisons with the traditional banks stand out and it is seen that the studies, in which participation banks are compared among themselves and effectiveness thereof is evaluated, are not sufficient. Responding the questions about the market share percentage and effectiveness of the participation banks in the same market with the other banks will be effective in the bank preferences of the individuals. Therefore, in this study it is aimed to rank 4 participation banks operating in our country according to their performances by 15 financial ratios and to determine the most effective bank. This study, which will show the ranking among participation banks, is a recent study as it has been conducted according to the data of last 4 years.

2. Literature

In their study, Yayar and Baykara [2012] focused on the effectiveness and efficiency of the Participation Banks in Turkey. Criteria for the effectiveness and efficiency were determined according to the data between 2005-2011 and effectiveness and efficiency among the banks were measured by TOPSIS Method. According to the results, it was determined that Albaraka Türk was the most effective Participation Bank and Bank Asya was the most efficient bank.

Doğan [2013] compared the financial performances of the Participation Banks and Conventional Banks that operate in Turkey between 2005-2011. Doğan [2013] used profitability, liquidity, risk, solvency and capital adequacy rates in the study. According to the analysis results, 4 different rates were determined between both banking types. Liquidity, solvency and capital adequacy rates of these were high and risk rate was lower.

Parlakkaya and Akten [2011] conducted a study to determine whether this difference is observed in the financial ratios of the structurally different Conventional and Participation Banks. 23 financial ratios were determined according to the data obtained between the years of 2005-2008, and regression analysis was applied. At the end of the study, differences in profitability and liquidity ratios were observed.

Ecer [2013] ranked the Private Banks in Turkey by comparing these banks' financial performances. To achieve this ranking, Grey Relational Analysis Method was used. In the study conducted, Garanti Bankası was placed on the top of the performance ranking.

3. Participation Banking

Participation banks, which first entered Turkey in 1983 as private financial institutions, took the title of Participation Bank as of 01.01.2006 with the amendment made in Banking Law No. 5411 in 2005.

Participation banks operate according to Islamic rules and there are 4 participation banks in our country, where 95% of the population is Muslim. These banks are Türkiye Finans Katılım Bankası, Albaraka Türk Katılım Bankası, Kuveyt Türk Katılım Bankası and Asya Katılım Bankası. Basic characteristics of these development banks, which are extending their shares continuously, could be listed as follows [Sayım & Alakel 2012]:

- ✓ Participation in profit or loss: Saver-bank relationship in participation banking is completely different from the depositor-bank relationship in conventional banking and basic characteristic of the saver is his/her participation.
- ✓ Support for the real sector: Due to working principles, participation banks cannot add value to their funds in the fixed income assets as other banks. Therefore, they have to regain the collected funds to the economy on the basis of participation.
- ✓ Risk Sharing Basis: Participation Banks enter into the relation of profit and loss partnership with the saver through participation account.
- ✓ Working Principle Based on Economic and Social Development: According to Islamic rules, participation banks do not provide every financing facility as they do not directly give money to the fund-using party. These banks provide finances after evaluating the value of a good or service morally and considering the national economy and nation's interests.

4. Data and Methods

4.1. Financial Ratios used in this study

In this study, 15 ratios which show the capital adequacy, liquidity, asset quality and profitability criteria years have been determined by using 4 year-data of the participation banks during the years between 2010 – 2013. In order to to obtain these data, it was benefitted from the internet site of Participation Banks Association in Turkey. In the analysis of the data, Grey Relational Analysis was carried out on the ratios which were calculated by taking the average of 4 years.
The ratios which were used to determine the financial performance are given as follows:

Table2: Financial Ratios

CODE	FINANCIAL RATIOS
s1	Equity Capital/ (Credit + Quotation + Operational Risk Amount)
s2	Equity Capital / Total Assets
s3	(Equity Capital - Fixed Assets) / Total Assets
s4	Net Balance Sheet Position / Equity Capital
a1	Financial Assets / Total Assets
a2	Total Loans And Receivables / Total Assets
a3	Total Loans And Receivables / Total Funds Raised
a4	Non-Performing Loans / Total Loans And Receivables
l1	Liquid Assets / Total Assets
l2	Liquid Assets / Short-term Liabilities
l3	Liquid Assets / Total Assets
k1	Net Profit / Loss / Total Assets
k2	Net Profit / Loss / Equity Capital
k3	Continuing Operations Before Tax Profit (Loss)/ Total Assets

The ratios shown as s1, s2, s3 and s4 codes in the table were the ones used to measure the capital adequacy of the bank. It refers to the ability of capital adequacy to deal with risky situations in terms of the bank. The risk here involves credit risk, market risk, operational risk etc. In the present study, four ratios acquired from Participation Banks Association were chosen to measure the capital adequacy of the banks.

The a1, a2, a3 and a4 coded ratios are related to active quality of the banks. The active quality is a crucial ratio for the banks. The most salient item in the bank actives is the credits. In the current study, the active quality was deemed significant with regards to performance evaluation of a bank, four ratios determined by the Participation Banks Association were preferred.

l1, l2, l3, l4 ratios demonstrate the liquidity adequacy of the banks. The banks are required to possess liquidity at a certain level in order to realize necessary cash outflow. As the banks which have a sufficient liquidity level portray a controlled approach in the market, they will be affected from abrupt changes at a minimum level. Four ratios considered appropriate on the internet site of Participation Banks Association were chosen for liquidity adequacy, which is quite important for the banks.

The last three ratios coded as k1, k2 and k3 are the ones which show the profitability of the banks. It would be unnecessary to remind that not only banks but also all other establishments aim to maximize their profitability. Three profitability ratios, which could also be defined as the result of a performance which lasts for a whole term, were reported in the present study.

While applying the method, the data are placed in a way to form a decision matrix first. Later, normalization table is formed by normalizing the values in this matrix. What should be taken into consideration at this point is that three different approaches are followed to certain situations, such as the data's being high, low or at a fixed value. Difference matrixes are formed by finding absolute maximum of normalized values. After then, a final evaluation is carried out so as to reach Grey Relational values. According to the obtained values, the degree of relationship is calculated.

4.2. Method

In this study Grey Relational Analysis is used.

4.3. Application

As stated in the beginning of the study, there are four participation banks in Turkey. The ratios determined in accordance with the data acquired from the internet site of Participation Banks Association between the years of 2010-2013. Their reference values were identified and normalization values were prepared by means of determining the distance of other ratios to these reference values. After then, difference matrix was formed by applying absolute value procedure. As a last phase of the analysis Grey Relational Coefficients Table was acquired by using the values in this matrix. Grey Relational Coefficients Table is the table which we could comment on the performances of the banks.

	OVERVIEW	
BANK NAME	**PERCENTAGE**	**RANK**
ALBARAKA	0,65	3
ASYA	0,42	4
KUVEYT TÜRK	**0,75**	**1**
TFKB	0,70	2

Comparisons were carried out according to these values.

Table 1: Participation Banks overall ranking table

In the current study, the performances of four participation banks in Turkey with regards to their financial ratios were determined. According to the analyses, Kuveyt Türk Participation Bank is the most prominent bank in terms of performance. This result is followed by Türkiye Finans Participation Bank, Albaraka Türk Participation Bank and Asya Participation Bank respectively.

When the items taken into account to determine performance are investigated one by one, while Kuveyt Türk Participation Bank takes the first place with regards to capital adequacy and liquidity, Türkiye Finans Participation Bank for active adequacy, and Albaraka Türk Participation Bank shows the best performance concerning profitability.

To comment on general performance evaluation from back to front, we need to start with Asya Participation Bank first. Asya Participation Bank brings up the rear concerning capital adequacy, liquidity and profitability ratios, but takes the third place in terms of active quality. In other words, there is not a big difference either between the sums of money reserved for the situations like operational risk, credits etc. and the equity capital or it could be claimed that this bank incurs debt by keeping equity capital low.

Therefore, ratios related to capital remain low. It could also be claimed that this bank is not successful with regards to reward-risk planning and due to this fact the bank's active quality and liquidty ratios are low and this condition causes their inability to increase liquidity potential in possession. This performance would manifest itself in the net profit obtained at the end of the term. Consequently, this bank remains in the last place for profitability performance.

Although Albaraka Türk Participation Bank takes the first place in the liquidity ratios rank, it could not sustain this success in general performance evaluation. The fact that bank is short of capital adequacy shows that this bank is not assertive in terms of financial position. Naturally, liquidity ratios have its share of this situation. Although its financial position is not very assertive, this bank managed the current situation very well and closed the end of period successfully and took the lead in the profitability ratios. However, as stated in the beginning of the paragraph, its failure in capital adequacy downscaled the general performance and led to third place in the rank.

Türkiye Finans Participation Bank takes the first place with regards to active quality while it takes the second place in the rank when it comes to general performance evaluation. The fact that its active quality is strong led to the formation of portfolio by planning the reward-risk relationship in a successful manner. Türkiye Finans Participation Bank, which has a higher value in terms of capital adequacy, showed a more successful performance in comparison with the other two banks.

Kuveyt Türk Participation Bank is the most accomplished participation bank with regards to general performance in our performance analysis which was carried out via four-year data. However, it could not show big success in active quality as it did in capital adequacy and liquidity. Although this bank's financial structure is strong, its failure to opt for right portfolio choices leads to active quality downfall. The bank's outstanding success in the evaluation of capital and liquidity provided it with the opportunity to take the first place in general performance by balancing the downfall in active quality.

Conclusions

Grey Relational Analysis was used in order to compare the performances of participation banks in Turkey. The significance level of 15 ratios used in the application was accepted as equal in terms of banks. As in previous studies, sample's being small and improper distribution (in the case of showing normal distribution or not) have an impact on the choice of Grey Relational Analysis method. Besides all these, the fact that this method has not been used in the studies carried out on participation banking is one of the other reasons to choose it for this study. It was aimed to present an updated study by using the last four-year data in the calculations.

According to the analyses results, the rank among participation banks is as follows: Kuveyt Türk, Türkiye Finans, Albaraka and Asya Participation Bank. Capital adequacy and liquidity ratios were found to be the most influential in Kuveyt Türk's taking the first place. Active quality and profitability follow capital adequacy and liquidity.

Steady capital adequacy of participation banks, which develop and grow day by day, would keep their financial structures strong. Consequently, they could leap forward to high income investments by not behaving timidly. Also, it could be claimed that the efficiency of the banks is related to profitability, but in parallel with liquidity and capital in possession, and the profitability is the result of these performances. As a final word, when the analysis results are concerned Kuveyt Türk Participation Bank is of a strong defence mechanism against the risks which may occur in the future. This strong mechanism is the biggest factor which makes it prominent among the other participation banks.

In the present study, it was aimed to fill the gap in the field by means of comparing the performances of the participation banks via Grey Relational Analysis. In the following studies, the performances of each year could be investigated individually, and the number of studies in the field could be increased by comparing the results which appear on a general basis.

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