ANALYSIS OF THE PROGRESS OF TURKISH BANKING SECTOR (2005-2016 PERIOD)

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ABSTRACT

Turkish banking sector is one of the most important leading sectors of the country's economy. In this regard, there is a close relation between the development of the economy and the sector's progress.

In this study, the aim is to analyse Turkish banking sector from a particular financial perspective, starting from 2005 when the reconstruction period following the crises in 2000 and 2001 was nearly completed. In the first step, it is questioned whether a significant difference in sector's development of trading volume during 2005-2016 period occurred or not. Besides the total assets of both the sector and the banks, financial instruments, loans and nonperforming loans that have important place among assets are analysed. In addition, on the resources side, the analysis is applied to the deposits, credits obtained and the growth in the shareholder's equity. Moreover, interest income, interest expense and profit/loss among the income statement items are examined; while progress of derivative contracts, suretyship and guaranty, as well as letters of guarantee are chosen to be analysed among off-balance sheet transactions. The development of capital adequacy ratio, which is also a significant data and informative in measuring precariousness of the sector and the banks, is examined. On the other hand, two important items in bank assets -loans and financial assets- and significant items of equity-deposit, credits obtained and shareholder's equity- are analysed to see if they have an impact on profitability. As a part of the analysis, banks are examined both individually and with the sector. They are classified with respect to their capital structures and size of assets. Then, the considerable variation between the progress of groups –if exist- are studied and the results are presented in detail.

Keywords: Bank, Banking Sector, Repeated Measures Analysis of Variance

INTRODUCTION

While banks function in funds mediation, they also enhance their operating volumes in parallel to the economic progress. In this progress, business cycle and conditions of competition in the market play fundamental roles alongside the policies of bank management.

In this study, development of the financial sizes of Turkish banking sector and operating chain deposit banks during 2005-2016 is analysed with respect to the figures in their financial statements in both scale-based and capital ownership aspects.

LITERATURE REVIEW

Although interest margins have no effects on the profitability of the USA banks, they effect Chinese banks in a continuous positive way. This supports the fact that China is a traditional bank-based economy. While interbank loans have a significant and positive impact on the profitability of Chinese banks, it is observed that they have a negative impact on the profitability of American ones. Whereas the size has a positive effect on the USA banks after

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the crisis and it affirms the scale economies of big American banks, it is striking that not having a scale economy affects Chinese banks negatively.

In their article Ding et.al (2017), examine and compare the profitability of the banks in the USA and China. USA has the biggest market-oriented banking system and China still uses the central banking system. The analysis conducted demonstrate that Chinese banks have performed better during their operation (2008-2014) than the USA banks in terms of profitability. While it had a negative impact on the USA banks' profitability, the credits on mortgage continuously developed the profitability of Chinese banks.

In the study conducted by Klaassen and Eeghen (2015), the aim is to create a new performance schema in order to explain the relationship between return on equity (ROE), risk adjusted return on capital (RAROC) and return on assets (ROA) by taking Du Pont analysis as a basis. The study aims at presenting how common financial ratios affect the progress of ROA, RAROC and ROE. According to the writer, analysts and regulators could apply the schema to analyse both the performance of an individual bank and the banking sector as a whole. In the study, the performance schema is used to analyse the main factors in the progress of the USA's commercial banking system between 1992 and 2014. In the end of the study, it is stated that the performance schema presented enables to analyse the relationship between a bank's risk profile and its performance, as well as the factor. Besides, it is also indicated that the schema presented is used to determine the risk appetite of a bank.

In the study conducted by Chaudhary (2014), the developments in India's banking system between 2009 and 2011 are discussed within the frame of private and public banks' sectoral situation. While the study emphasizes the increase in the commercialization of banks during the relevant period, it states that the number of private banks have also increased. Also, the commercialisation of banks occurs in the areas such as customer satisfaction, asset structures, management activities and branch networks. At the end of the comparisons done between the subjects such as liquidity, management activity, asset quality, bank growth, capital adequacy ratio, productivity and branching, it is stated that the sector has made a progress. Moreover, the study concludes that the banks have started to give more importance to customer satisfaction.

In the study conducted by De Bonis et.al (2012), the main criteria of Italian banking system during 2007-2009 financial crisis period are compared with the other big Eurozone countries. The analysis focuses on the banks' growth, ownership, competitive power, roles on the company financing, composition of financial statements, degrees of internationalization, and profitability. The study states that Italy's being affected by the crisis is an exterior event for the banks. It is determined that Italian banks' traditional commercial model which is different from the English, American and other European models, has protected the banks from the effects of crisis. It is emphasized that, deposits and bonds where the large part of finance is owned by the household, deleverage, a high level of profit to international standards, banks' role in the asset management industry, protection of private property, and lower lending rates than the Eurozone rates, which are in use for many products appear in this model. In the study, it is suggested that the banks reduce their operational expenses, increase their incomes, while developing their relationship with the customers, and enhance their transparency.

The aim of the research conducted by Abbas et.al (2012) is to analyse the financial performance of Pakistan commercial banks within the five years' period of 2007-2011. That period is chosen since it was such a time when the financial performance of Pakistan banking sector has made an important progress. In the study, those banks that take attention regarding those five years and have more than 4000 branches are taken as bases. Although various financial ratios such as return on assets (ROA), return on equity (ROE), return on capital

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(ROC) are generally used in the analysis of the banks' financial performance, in this study return on fixed-assets (ROFA) indicator is used to evaluate financial performances. Return on fixed-assets presents how banks use their business fixed-assets and how their business fixed-assets contribute to the banks' performance in return. The study uses total assets, total shareholder's equity and total business fixed-assets in the evaluation of the five banks examined in this study with respect to the period they belong. The aim is to create groups within the frame of the strategic group theory in order to make the performance assessment more meaningful. Strategic group theory assumes the existence of the stable company groups that adopt similar commercial strategies. In the study, cluster analysis is used to define the strategic groups in banking sector. Furthermore, the writer states that dividing the banks into groups by using panel regression methods is statistically significant in explaining the profitability of banks. According to the writer, categorizing banks into strategic groups and allowing the groups to react the outer shocks differently help to explain the profitability of banking sector in a more accurate way. Therefore, a more precise assessment could be made regarding the banks' loss tolerance ability. Nevertheless, there is no evidence concerning the usefulness of the strategic groups in explaining the bank portfolio quality where total loans and nonperforming loans are evaluated.

In our study, chain deposit banks operated continuously between 2005 and 2016 in Turkish banking sector are examined.

DATA SET

Within the scope of analysis, these items from the financial statements of banks: total assets, financial assets, loans, nonperforming loans, total deposits, credits obtained, total shareholder's equity, profit/loss, total interest income, total interest expense, derivative contracts, suretyship and guaranty, guarantee letter figures and capital adequacy ratio have been analysed. Data used in the analyses is obtained from statistical data section on the Banks Association of Turkey's web site. Within this respect, apart from 14 different data regarding 12 consolidated periods of the banking sector, 3528 data are used in the analysis including 20 banks, 12 periods and 14 different data sets.

The number of continuously operating deposit chain banks during 2005-2016 in Turkish banking sector (Akbank T.A.Ş., Türkiye Cumhuriyeti Ziraat Bankası A.Ş., Türkiye Garanti Bankası A.Ş., Türkiye Halk Bankası A.Ş., Türkiye İş Bankası A.Ş., Türkiye Vakıflar Bankası T.A.O., Yapı ve Kredi Bankası A.Ş., Alternatifbank A.Ş., Anadolubank A.Ş., Burgan Bank A.Ş., ICBC Turkey Bank A.Ş., Fibabanka A.Ş., Turkish Bank A.Ş., Turkland Bank A.Ş., Denizbank A.Ş., Finans Bank A.Ş., HSBC Bank A.Ş., ING Bank A.Ş., Şekerbank T.A.Ş., Turk Ekonomi Bankası A.Ş.) is 20. Within the scope of this study, data from 20 corresponding banks are taken as bases.

ANALYSIS AND FINDINGS

Data obtained from The Banks Association of Turkey's website is analysed by using SPSS 17.00 statistical package for the Social Sciences. In the analysis, descriptive statistics techniques such as percentage, arithmetic mean and standard deviation are used. In order to check whether there is a significant difference between the averages of data obtained from the sequential measurements or not, Repeated Measures ANOVA is put into use. The tests for the groups analysed are conducted at 0, 05 level of significance.

The analysis is conducted from four different points of view:

1- The first analysis aspires to view the period, where the development of each financial item on yearly basis differs from the other financial items:

- In the course of active development, while there is a difference as to 2011 in comparison to the previous years, each following year has made a different progress from the previous one starting from 2011. The only exception is 2016, when there was no difference from the previous years.

- With regard to the financial assets, it is observed that only in 2016 there has been a different progress in comparison with 2007, 2012 and 2014; all the other periods have run similar courses.

- In terms of loans and receivables, it is seen that there is no difference between the last three years (2014, 2015, 2016), while all the other periods have different development courses.

-When nonperforming loans item is considered, 2013 and 2014 have different development courses from the years until 2012 and 2015 and 2016 run different courses from all the years until 2014. The developments of other periods are similar to each other.

- In terms of total deposits, 2013 is different from all other years. At the same time, the years between 2012 and 2016 have usually run different courses from all previous periods. Only 2015 and 2016 are not different from each other in developmental aspect.

- In the category of credits obtained, while each year between 2013 and 2016 has made a different progress from the previous one. 2015 and 2016 are the only years that have a similar course.

- Total shareholder's equity item run different courses between 2011 and 2016. The only similarity is between the developments of 2015 and 2016.

- When profit/loss item considered, all periods have similar progress, no difference is observed.

- From the point of interest revenues, 2012-2016 period is predominately different from the previous years. The only similarity in this period is between the progress of the years 2015 and 2016.

- In terms of interest expenses, during the years between 2014 and 2016, there is a different progress from the previous periods.

- With respect to derivative financial instruments item, it is observed that only the years 2013 and 2014 have different progress from many previous years.

- When suretyship, guarantees, and guarantee letters are considered, it is seen that these two items have similar progress. The years between 2010 and 2014 run different developmental courses than the years until 2009.

-In terms of capital adequacy ratio, there is no difference concerning progress in general. Only 2009 makes different progress from 2010, 2011 and the years between 2013 and 2015. All the remaining periods have similar progress.

2- The difference test of bank groups categorized as small big and mid-sized with respect to their total assets is conducted at 0,05 significance level. When the progress of 20 chain banks regarding the analysis period is evaluated with respect to their size of assets:

- The financial items that have different progress in big, small and mid-sized banks: loans, nonperforming loans, profit/loss, total interest revenues, total interest expenses.

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- The financial items where big sized banks are separated from the small and mid-sized ones, whereas the latter make similar progress: total assets, financial assets, total deposits, credits obtained, total shareholder's equity, suretyship and guaranty, and letters of guarantee.
- The item where big-sized banks are separated from the small ones, while big and mid-sized ones make similar progress is derivative financial instruments.
- The item where big, small and mid-sized banks have similar progress and not separated from each other is capital adequacy ratio.

3- 20 chain banks are categorized by their capital properties as domestic private, foreign private and public finance banks. In the analysis, no difference between the groups in terms of many financial indicators' progress is encountered. The only difference is between nonperforming loans, total deposits and interest expenses items of public finance banks and the foreign-invested ones. All items of public-finance banks and private domestic banks are similar in their progress.

4- Lastly, specific to each bank within the scope of analysis, the progress of all items is examined.

- When banks are compared with each other by the items of assets, financial assets, loan and receivables, total deposits, total shareholder's equity, suretyship and guarantee, letters of guarantee, interest expenses, interest revenues and profit/loss, it is observed that almost all seven big sized banks are similar in themselves. In addition, they make different progress from the remaining 13 small and mid-sized ones. The 13 small and mid-sized banks do not vary from each other.

- It is observed that the six big banks -except Akbank- differ from the small and mid-sized ones, while they are similar to each other in terms of non-performing loans.

- With respect to the credits obtained, two public ones-TC Ziraat and Turkiye Halk Bankası- out of big sized banks vary from the other five big-sized banks and become similar to the other banks in their progress.

- In derivative financial instruments item, Akbank, Turkey Garanti Bank and Yapı Kredi Bank make similar progress to each other and vary from all remaining banks. All banks, except from those three have similar courses in years with respect to that item.

- For capital adequacy, only Turkish Bank has a different individual progress as against all remaining banks.

CONCLUSION

In this study, the progress of Turkish Banking Sector during 2005-2016 is analysed from different perspectives. The data analysed are obtained from 20 banks and financial statements of Turkish Banking Sector belonging 2005-2016 period. Those items analysed are total assets, financial assets, loans, nonperforming loans, total deposits, credits obtained, total shareholder's equity, profit/loss, total interest revenues, total interest expenses, derivative contracts, suretyship and guaranty, letters of guarantee and capital adequacy ratio. The findings of the analysis could be summarized as follows:

- In the overall assessment of the sector as a whole, it can be stated that the data analysed make different progress especially after 2013, with respect to the previous years. The main reasons for that change are considered as the pressure put by the shrinking profit margins on the banking sector on one hand, and the fluctuant macro-economic balances on the other.

- Following the categorization by scale, it is observed that big, small and mid-sized banks not only make different progress in capital adequacy ratio item, but also in other items at times. Because, while the minimum 8% rate is to be maintained in capital adequacy ratio, it becomes 12% for the banks that open new branches. On the other hand, for the banking sector, where everybody knows that the high capital adequacy ratio means keeping unprofitable equity, this rate generally goes between 12% and 16% in terms of chain banks. This originates from the sector's having kept its progress for this item in a range bound by years.

- The prominent developments according to the capital ownership analysis are indicated below:

  * Foreign-invested banks place more importance on risk management. On the other hand, public banks feature public duties as a result of the ownership relations. Therefore, all these developments show themselves as a variation in nonperforming loans item.

  * The main reason why public banks vary from the foreign-invested ones in terms of deposit is that the public banks have domestic deposits as sources of funds, while foreign ones lay on foreign borrowing.

  * The reason for the difference between public finance banks and foreign ones in terms of interest expenses can also be attributed to the structure of resources. The public banks have higher interest expenses since they operate mainly with deposits. Nevertheless, for foreign banks predominantly borrow from foreign markets, they have lower interest expenses.

- When banks are compared individually, the reasons of prominent differences could be stated as follows:

  * The difference examined during the group analysis between public banks and foreign-invested banks, is observed in individual analysis as well. Thus, when we look at the banks varying from the others individually in terms of the progress in credits obtained item, we realize that all of them are foreign-capital banks.

  * From the perspective of derivative financial instruments, the figures of those banking sector banks that use derivative products in risk management most vary from each other during the analysis. Akbank, Garanti Bank and Yapı Kredi Bank are the top users of derivative instruments in the sector.

  * Turkish Bank varies from the other banks significantly in terms of capital adequacy ratio. When Turkish Bank's financial statements examined in detail, it is observed that its loans and financial assets figures are low during the beginning period of the analysis, whereas its asset availability is predominantly interbank money markets. As a result, the bank's capital adequacy ratio is above 50% in the relevant period. The ratio decreases at considerable levels in time and consequently it has a different progress from other banks.

In conclusion, it could be stated that in banking sector's reorganization period after the crisis, with respect to the progress of various financial values, especially foreign banks vary from the others in resource and resource utilization, risk management and expenditure items. Furthermore, it is observed that in the banking sector where risk management comes into prominence gradually, apart from three big banks, the other ones do not show an interest in the derivative financial instruments that are one of the most significant risk management tools.

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