

# The Effect of Corporate Governance, risk Management on the Performance of Banks in Turkey

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**Abstract:** It is widely believed that banks are the backbone of the economy and the financial sector of any country. The stability and growth of any economy depends largely on the stability of its banking sector. So this study aims to contribute by declare the variables that affect performance of banks in turkey. The study included two independent variables corporate governance (CC) and risk management (RM), and one dependent variable is performance (P). In the study the proxy variable selected is two ratio to represent each variable. CC represented by capital adequacy ratio (ACC) and equity to total assets ratio (BCC), RM represented with liquidity ratio; proportion of liquid assets to total assets (ARM) and proportion of liquid assets to short-term liabilities (BRM), performance measured by return on assets (AP). These ratios selected based on revision the literature review and availability from secondary published data from banks association of turkey and participation banks association of turkey web sites. Three participation (Islamic) banks and twelve deposit banks are included. STATA application is used by applying ordinary least square OLS analysis in order to find out the correlation among these ratios selected. Panel data for eighth years from 2010 to 2017 are used. The (pooled) OLS is a pooled linear regression without fixed and/or random effects. It assumes a constant intercept and slopes regardless of group and time period. This pooled OLS model fits the data well at the .05 significance level ( $F=17.31$  and  $p<.0000$ ).  $R^2$  of 0.2882 says that this model accounts for 29 percent of the total variance in the total AP of banks. The regression equation is, OLS:  $AP = \beta_0 + \beta_1 ACC + \beta_2 ARM + e$   $AP = 2.07 + (-0.16 ACC) + (0.11 ARM)$ . Even in case of zero ACC and zero ARM, each bank is expected to have 2.07 units of total AP ( $p < .006$ ). For one unit increase in ACC, the total AP of banks is expected to decrease by (-0.16) units, holding all other variables constant ( $p = .007$ ). Whenever ARM increases by ten units, the total AP will increase by 1.1 units, holding all other variables constant ( $p < .001$ ).

**Keywords:** corporate governance, risk management, bank performance in turkey

## 1. Introduction

It is often said that the economies of all countries depend to a large extent on the performance of their banks. It is widely believed that banks are the backbone of the economy and the financial sector of any country. The stability and growth of any economy depends to a large extent on the stability of its banking sector.

Historically, in Turkey, the banking sector was the most important sector in the entire financial system. The assets of the Turkish banking industry account for more than 85% of the total assets of the financial system. Other financial sector elements, such as insurance, factoring or leasing, account for only a small fraction of the Turkish financial system. A positive aspect of this dominant position is that if the banking industry is effectively supervised, financial regulation in other financial sectors is easy to achieve. The consensus in the literature proves that the sector of banking system especially banks performance has an impact on business growth. Therefore, there is a need and a lack of understanding of the relationship between regulation and risk management and its impact on the performance of Turkish banks. the main purpose of this study is to address this research gap by analyzing and investigating whether there is a correlation between CG, RM, and bank performance BP's focus in practice.

## 2. Research Objectives and Questions

Due to the importance of corporate governance, risk management and bank performance in economic growth in

Turkey banking sector, this section will present the main objective of this study is as follow:

To evaluate the significance and to explore the relationship between corporate governance, risk management and the performance of banks in Turkey.

To achieve the objectives of this research, one main question has been developed as follow:

**Q.** Is there a significant relationship between corporate governance, risk management and bank Performance?

### 2.1 Hypothesis

**H0:** combination of better corporate governance and risk management lead to better bank's performance.

Banks that implement good corporate governance and manage their risk effectively will have the advantage of enhancing their performance presented by bank's returns. Because the owner's interest is to earn a better return on their investment (equity), they will attempt to force the management to implement better corporate governance and effectively manage their risk; the results of this study will provide an answer to this question and determine the key factors of developed bank performance, which are the corporate governance and risk management.

### 3. Data and Methodology

**Data:** This study will deal with empirical analysis of quantitative data by the use of panel data of participation and conventional banks. In this study using statistic test, examine the correlation between variables, used ordinary least square OLS, regression analysis of whole data with suitable SPSS and STATA software. The researcher will obtain the necessary data from secondary sources, from the annual reports as well as the financial statements reported for the selected sample of banks; Secondary data can almost be gathered faster and at a lower cost than primary data. It can be obtained from statistical abstracts, databases and annual reports. In addition with the circumstance restrictions of the researcher such as timetable, language barriers cost of collecting data, which makes several difficulties to include qualitative data in this study. As it is known quantitative data is more reliable and considered as scientific method.

The data will be from a wide period as long as possible and ending in 2017 for Turkey. (The period from word crisis until now seems to be unstable everywhere in the world). The sample will determine regards scientific methods which random and represented to population, we chose 15 fifteen after excluded the outliers among the banking sector in Turkey. Some correlation and ordinary least square OLS analysis are expected to be carried out on data and to find out the impact of some independent variables (CG & RM) on the depended variable bank performance BP.

#### 3.1 Corporate Governance in banking sector

Igbal Z.(2017) Word bank- BRSA-TKBB presented What is Corporate Governance? Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders .

Corporate governance also provides the structure through which the objectives of the company are set and the means of attaining those objectives and monitoring performance are determined.

Why is Corporate Governance Important ?

Resolve conflicts of interest among the management, board, shareholders and other stakeholders, as well as protecting all stakeholders' interests.

Set vision and mission statements and strategic targets for the company .

Achieve the strategic targets set by ensuring application of best practices in :

- Internal control system
- Regulatory compliance
- Accounting and Auditing
- Risk Management
- Information disclosures
- Socially Responsible Business

The rapid growth in the business sphere has increased the role of management in the running of their businesses. Management in turn tries to find the best ways to exercise rational management to maximize the wealth of

shareholders. Due to the separation between owners (shareholders) and managers, management is required to sustain the confidence of their shareholders.

Unfortunately, this confidence has been affected by many scandals, which have led to the collapse of many businesses such as Maxwell, WorldCom, Enron, and the Bank of Credit and Commerce (BCCI) (Ezat, 2010) .

Because of these scandals and collapses, some urgent questions have been raised about the relationship between shareholders and management of companies, and how to arrange this relationship to recognize the optimal management of wealth and use of resources. Furthermore, professional institutions and organizations have begun to consider establishing a system that guarantees the non-repetition of these collapses. Consequently, the concept of corporate governance and risk management emerges as a solution to those problems. Transparency, fairness, accountability and responsibility are the four main principles of effective corporate governance, these principles are very important to provide legitimacy to the corporate level in the banking sector (OECD, 2004). Furthermore these principles have a crucial implication on the growth of banking sector and economic as a whole (World Bank report 2006). Furthermore, this report showed that countries could enhance the population life style when they enforce rules and clauses of the contracts and eliminating the barriers toward any new business. The evolution of the concept of Enterprise Risk Management (ERM) has reflecting the objectives of reducing costs and mitigating risk. At the same time the management do the best to maximize the revenues in order to add real value to the business firm (Robert Wolf 2008) .

As per the OECD (2004) by Goodhart (2011) corporate governance is a group of association between all stakeholders; management, board of director, shareholders, employees, customers and investors. In addition to the above, corporate governance refers to the organizational structures, internal control and business processes of the firm. Corporate governance highlighted the importance of responsibility and accountability among the main stakeholders within the firm, and focused on the rules and procedures for making decisions on corporate affairs. Furthermore, corporate governance also provides the structure through which the objectives of the company are set, and determines the means for reaching these objectives and monitoring performance (Basel Committee on Banking Supervision Principles for enhancing corporate governance October 2010) .

According to the above points of view, it can be concluded that there is no generally accepted definition of corporate governance. Nevertheless, a basic line should be maintained by all the definitions. This line is the structure of corporate governance, which constitutes to direct, manage, and control company affairs and strategies, regardless of the party/parties to which the companies are accountable. Corporate governance also provides the structures through which the objectives of the company are set, and by which the means of attaining those objectives and monitoring performance are determined" Goodhart .(2011)

From the above, corporate governance seeks to maintain a balance between all related parties either inside the corporation i.e. the management, the board of directors and CEO, or outside the bank i. e. the shareholders and other stakeholders. Therefore, in order to determine the objectives of corporate governance, it is worthwhile investigating the forces used by corporate governance to balance all the parties.

Generally, there are four main powers that may be considered in the context of corporate governance; the ownership power, directors' power, managerial power and institutional shareholders' power (Tricker 1984; Monks and Minow, 2004). All these powers should be balanced within the bank. Unfortunately, there is a separation between who owns the money and who runs the business. This separation transfers the power from shareholders to management, who are then able to run the business more effectively (Monks and Minow, 2004).

T.G. Arun, and J. D. Turner (2003) The corporate governance of banks in developing economies is important for a few reasons. To begin with, banks have an overwhelmingly dominant position in developing-economy monetary systems, and are amazingly important engines of economic development (Ruler and Levine 1993a,b; Levine 1997). Second, as financial markets are usually underdeveloped, banks in developing economies are regularly the foremost critical source of fund for the majority of firms. Third, as well as giving a generally accepted means of payment, banks in developing countries are more often than not the main depository for the economy's investment funds. Fourth, numerous developing economies have recently liberalised their banking frameworks through privatisation/disinvestments and diminishing the role of financial regulation. Consequently, supervisors of banks in these economies have obtained greater freedom in how they run their banks. we contend that the special nature of the banking firm, whether within the developed or creating world, requires that a wide see of corporate governance, which encapsulates both shareholders and depositors, be received for banks. In specific, the nature of the banking firm is such that control is vital to ensure or protect depositors as well as the overall financial system. Utilizing this knowledge.

#### 4. Concepts of Risk Management in Banking Sector

The risk management in Turkey country has been evolving rapidly during the last couple of decades. At the same time, the social, economic and political environment is subject to increasing volatility. In such an environment, risk management has risen onto the international agenda especially in banking sector. Banks are realizing the need to manage compliance, financial, hazard, operational, as well as strategic risks in a comprehensive manner and align these activities more closely to the enterprise's objectives and risk appetite (Randeve et al. (2014)).

The popular definition of risk management is "a process of identifying, assessing, and prioritizing risks of different kinds". Once the risks have been identified, the risk manager

will create a plan to minimize or eliminate the impact of negative events. Gordon et al. (2009) stated in their study that there are five factors affecting the banking sector: environmental uncertainty, industry competition, firm size, firm complexity, and board of directors' monitoring. In addition, public policy makers around the world have started to question the appropriateness of the current corporate governance applied to financial institutions.

(SOX) in 2002, financial expertise is considered to embody an important role. Other, more specific measures involve either the creation of a dedicated risk committee or designating a Corporate Risk Officer (CRO) who oversees all relevant risks within the institution (e.g., Brancato et al. 2006; Sabato, 2010). Mongiardino and Plath (2010) indicated that the risk management in highly structured banks have enhanced and improved to some extent, despite the effect of the financial crisis. In general, in the banking sector there is a robust correlation between bank performance and risk management because the major objective of bank management is to increase bank return and enhance performance; this objective could not be achieved unless the bank has a very strong risk management team who can manage and mitigate the risks to the acceptable level. For the most part, financial risks comprise of market, liquidity, and credit risk (Akkizidis, Kumar, 2008:32). Credit risk, be that as it may can be characterized as the possibility that the partner might not be able to pay its obligations. As depts show more 70% of assets in banks' balance sheets there's no ponder that credit risk is the most reason for banks insolvency (Van Greuning, Bratanovic, 2009:161). In addition, banks face various kinds of risks such as interest risk, market risk, credit risk, off-balance risk, technology and operational risk, foreign exchange risk, country risk, liquidity risk, and insolvency risk. The bank's motivation for risk management comes from those risks that can lead in case of failure to bank underperformance.

#### 4.1 Bank performance in banking sector

In recent years high attention to the bank performance has become more focused in the banking system. After the financial crisis of 2008, bank's management is taking actions to improve and enhance the bank performance measurement capabilities in light of economic and market changes. There are number of methods to measure the bank performance such as; profitability (Return on Assets ROA, Return on Equity ROE, and Net Interest Margin NIM to investigate the interest-related side of the business), efficiency variables (ratios of total overhead costs to assets, and personnel costs to assets), asset allocation (Securities to Assets ratio), asset quality, liquidity and productivity.

In this study, the profitability represented by ROA and ROE, and NIM will be used as a proxy for BP. With concentrated on the ROA is the bank's net income to its total assets. This variable has been heavily used in much previous literature to measure the BP. and the ROE is the bank net income divided by common equity. Both of ROA and ROE measure the ability of bank's management to recognize return on their assets and equity.

#### 4.2 Summary and Conclusion about Variables Chosed

The main components of this study are corporate governance, risk management, and bank performance. Due to the importance of both corporate governance and risk management and their implications on banking performance, this study will analyze and explore the relationship between all of them in order to assist the stakeholders, shareholders, management, and investors in achieving their business goals. This study focuses on corporate governance and risk management practices in turkey banking sectors, and attempts to assess their impact on the bank's performance. Whilst there is no strict regime for implementation of corporate governance or risk management frameworks. Turkish banks, through regulations from individual central banks, have laid down corporate governance and risk management requirements within their domains.

The results of this study are based on investigating and analyzing the association between the selected variables that reflect the banking performance in Turkey region. More importantly, this research will allow us to assess the Corporate Governance, Risk Management and Performance, Stakeholders impact of corporate governance and risk management as a management tool and assess the effect of applying both together.

Following to the above-mentioned collapses, scandals, word crises and 2001 Turkey's cries, the corporate governance came on the top of the global agenda. The financial crisis had some harmful consequences towards economic sphere, which prompted more studies and investigation as to its origins (Al Karasneh et al. 2006). Moreover, one of the major reasons behind these crisis and collapses was the bad corporate governance and risk management within the financial system (liberalization or deregulation). As a logical solution for that, the adherence to good corporate governance and applying effective risk management are currently recognized as crucial in preventing financial crises.

#### 4.3 History of banks in Turkey in general after war one until 1960

Ozturk H. (2014) explained development banking was utilized in order to support the development of entrepreneurship and industrialization in Turkey like many other developing countries. Subsequently, from the Nineteen Thirties, the state became the riding force of industrialization. Sumer bank and Etibank, for example, supplied huge assist to country projects that helped the industrialization of the country. The World War II interrupted the development of state-led industrialization procedure. Eventually, Turkey entered into the 1950s with a significant progress in development; however the Nineteen Fifties has additionally proven that the country has reached its limits via state-led industrialization strategy. Soon after, the government changed its policy focus to private sector. This policy shift resulted in considerable amount of credit and foreign exchange allocations in private region. The Nineteen Fifties also witnessed great growth in the private-owned banking.

Ozturk et al., (2010) referred the authorities also added a profit grantee assure scheme to the bank's shareholders to returned the presence of private ownership in the country. The established order of the financial institution also reflects the goal to vitalize private entrepreneurship and liberal markets. Amongst its targets to help private establishments, inspire private and overseas capital in businesses and assist to the establishment of countrywide capital markets in Turkey were at the top priorities. The assist for state-led industrialization persisted Until the end of 1950s, however, the heavy investment program of the government became followed by way of inflationary increase.

#### From 1960 to 1980 (Stabilization Program)

Ozturk et al., (2010) declared the liberal regulations of the Nineteen Fifties came to a stopped in 1960 with an army intervention, the purpose is stabilization program and preserve stability. The previous expansionary financial policy turned into national improvement plans and establishment of a state organization for that reason. Thereafter, and with the establishment of state planning organization (DevletPlanlamaTeskilati), the notion of planning via International Standard Industrial (ISI) have become a primary element of economic policy-making in Turkey. The significance attached to development banking rose notably during the ISI duration among 1960 to 1980. All through this period, many other development banks have been set up.

Denizer C. (1997) also agree that until eighteenth, the Turkish economic system developed beneath an umbrella of monetary and regulatory guidelines geared toward helping the country development strategy. Especially after the early Sixties, the commercial bank ruled financial instrument and operated below a framework through controlled interest rates, directed credit score programs, high reserve requirements, and different restrictions on financial inter-mediation, in addition to constrained entry.

Even as those financial and regulatory regulations had been contributed to turkey industrialization, they had their costs on the banking system's competitiveness and efficiency. Interest rate controls caused Non-price competition inside the form of branch network. This situation and restrictive entry policies among 1960-80, gave rise to focused market dominated through public and private banks owned industrial companies with huge branch networks and excessive overhead costs. Looking back, it is usually concept that the mixture of these factors created a noncompetitive market shape and an inefficient banking system.

#### From 1980 until Turkish Crisis 2001 "liberalization period"

Ozturk H. (2014) declined the Nineteen Eighties gave a brand new route to development banking within the country, as the ISI approach couldn't remain particularly because of the foreign exchange shortage. Consequently, the Eighties brought about structural changes in the roles of the state that were the main vehicle for effective investments within the economy. Then, substantial state regulation and intervention has left its area to deregulated markets. The development banks tended to leave from medium and long-term credit

facilities which were the center of development banking activities willing to offer shorter time period loans like other commercial banks. The situation of development banking within the banking system has deteriorated throughout the liberalization time.

Denizer C. (1997) argued in beginning in June 1980, as part of a far attaining stabilization and structural adjustment program, the government carried out financial liberalization and deregulation measures aimed toward developing an efficient and competitive financial sector. Reforms removed interest rate controls, eased the entry of recent financial institutions, and allowed new types of instruments. There have been also policy measures to increase equity and bond markets.

Even though there had been occasional barrier and policy reversals in phrases of interest price controls and a banking crisis in 1982, reforms have brought about major adjustments inside the zone. Rest of regulatory limitations has attracted a widespread range of banks into the system, both Turkish and foreign. Reforms were additionally successful in stopping the decline in financial intermediation contributed to financial and a revitalization of the stock market. On the equal time product variety extended and pleasant of financial services advanced. Furthermore, the Turkish banking devices have become more integrated with the external financial international and stepped forwards its financial technology and human capital.

Isik I. & Kabir H. (2001) In January 1980 discussed liberal economic policy turned into adopted in Turkey to promote monetary market improvement and increase the efficiency and productivity of the financial zone via competition among banks. As a result of this policy, Turkish banks responded via streamlining their operations and investing in new technology. They examine productivity increase, performance change, and technical progress in Turkish commercial banks during the deregulation of economic markets in Turkey. They found that all types of Turkish banks, although in different magnitudes, have recorded enormous productiveness profits pushed mostly via efficiency increases rather than technical progress. But, was commonly attributable to improved resource management practices rather than improved scales. Our results also suggest that private banks started out to close their performance gap with public banks inside the new environment.

Denizer C. (1997) claimed that In June 1980, simultaneously with the structural adjustment and broad liberalization policies, the authorities released financial reforms. The purpose was to develop a competitive and efficient financial device that might help an extra liberal economic system. This changed into to be done via deregulation and promoting entry into the system. Reforms removed interest rate restrictions on deposits and loans, and eased entry into the marketplace and approved new kinds of financial devices and institutions. The deregulation noticed sharp will increase in interest rates. large banks expanded their rates which led to fierce competition and extraordinarily excessive real interest rates. This case, mixed with financial distress in actual sectors caused the collapse of six banks

throughout 1983 and 1984. Those developments in turn has caused partial reversal of reforms and the central bank started out to reregulate deposit interest rates until 1988 from time to time adjusting them to keep positive actual rates of return. In late 1988, deposit rates have been again liberalized and this policy was maintained because then although there had been a number of temporary interventions. Consequently, the transfer to price competition was not entire until late 1988 although the reform procedure began in 1980. Higher levels of interest rates led to extensive growth of the financial system and contributed to financial. Via the give up of 1990, the stock of financial assets reached 47 percent of GDP from round 28 percentages in 1980. In keeping with financial liberalization policies. Even though reserve requirements were reduced, liquidity ratios have been increased which in turn placed a wedge between deposit and loan rates.

Denizer C. (2007) concluded the variable inflation and unstable growth patterns affected bank efficiency in Turkey. And that the effectiveness of financial reforms in developing countries would additionally depend on establishing a stable macroeconomic environment. Another essential finding is that in the case of Turkey the scale problem may had been brought about and exacerbated through the volatile macro monetary environment. In this connection, specifically the volatility of boom and inflation that made short term scale adjustment more difficult to achieve, and the easy profits from lending to government at high interest costs, which did not provide incentives to transport in the direction of best scale.

#### **From crises 2001 until now reconstruction of market**

The interest rate regulation has vital role in crises, inflation and stability of country economic as Saltoglu B. (2012) declared a quick report of the Turkish financial crisis 2001. Turkey went via two consequent banking and currency crises. In 1999, Turkey had sign edits sixteenth stand-with the aid of agreement with the international monetary fund (IMF) to solve its debt sustainability problems. Initially, many market contributors believed that the IMF program could be successful where inflation had proven signs of development. However, a few banks had been greater optimistic than others and decided to take a higher balance sheet and liquidity risk than others. For instance, Demirbank took a totally massive interest rate risk. In late November 2000, financial markets had experienced a sharp selloff which triggered a huge panic and caused a capital outflow from the Turkish economy. The central bank of the Republic of Turkey (CBRT) could not supply liquidity for Demirbank, causing Sudden capital outflows eroded 25 % of the CBRT's foreign exchange reserves, inflicting Demirbank to be taken over by the Turkish FDIC. An exchange rate crisis accompanied this liquidity crisis. In February 2001, the financial system experienced every other huge disruption, causing some state banks to end up insolvent. The thrust loss within the financial markets caused increasing in an exchange rate crisis, Turkey got to abandon its constant exchange rate system through switching to a flexible exchange rate mechanism. This caused 50 % devaluation on the local currency, and restructuring the banking system brought on more than forty percent of the Turkish, Gross domestic product (GDP) to evaporate.

Numerous financial reforms had been implemented since then.

Berument H. & Malatyaly K. (2000) studied determinant of interest rate in Turkey and they resulted with next relations, actual interest rates decrease with higher inflation. Additionally the empirical evidence indicates that maturity decreases with higher inflation. Over all, this can propose that the government makes use of each auction interest rates and maturity as a policy tool for lowering the burden of government debt servicing for this reason that lenders in Turkey choose shorter maturity while demanding better hazard premium.

Alper C. (2001) also in agrees with previous studies, he discussed liquidity crises and mismatches problem due to interest rate, he till the interest rate became the primary reason of the strong increase within the modern account deficit and the sensitivity of the banking system. This as a result of the actual return to savings and government securities and extended the maturity mismatch risk, The liquidity crisis because of under shooting of the interest rate might have been prevented.

In consensus with previous studies, Saltoglu B. (2012) argued after crises reforms, the Turkish banking sector made great development in restructuring itself. First, massive amounts of capital have been injected into stricken state banks. Further, after the crisis, an independent banking supervisory body known as the Banking regulation and Supervision agency (BRSA) became set up. These reforms helped Turkey's overall re-stabilize the macroeconomic fast. Turkey's annual inflation rate has reached an incredibly acceptable level. Strong fiscal discipline has been an advantageous factor in the improvement of the Turkish economic system. After the implementation of fiscal reforms, the ratio of government debt to GDP fell under 40% in 2011. Another nice element of public debt is that it has a relatively long time maturity. As a result, those reforms helped to extend the period of the Turkish public debt portfolio. Turkish treasury multiplied the maturity of the debt to 5 years in 2012. This is a notably long term in comparison to many developed countries. Therefore, within the last decade, the Turkish treasury has decreased the macroeconomic risk of the Turkish economic system. It should to be remembered that among 2002 and 2007, international economies had the highest risk appetite rates and helped to successfully implement Turkish treasury reforms. As international liquidity is a huge, strong capital flows to Turkish treasury instruments have helped to reduce interest rates regularly. Without this wonderful global environment, it is essential to understand that those reforms will not be applied effortlessly.

Aysan A. & Ceyhan S. (2007) made a study declare after 2000, the productivity increase was solely due to technological improvement reflecting the existence of structural changes in the Turkish banking sector. They also observed that after 2000, pure technical efficiency of the sector increased reflecting the fact that the quality of bank management has been of increasing importance.

Akin G. ,Aysan A. and Yildiran L. (2001) also in parallel in talking about excessive inflation rates had been a major problem in this period; liberal foreign trade regulations and a managed exchange rate regime have been the treatment proposed via worldwide institutions. Excessive for (Economics) public sector borrowing requirement PSBR and the resulting high interest rates, together with the government's commitment to the managed exchange rate regime, caused significant amounts of short-term capital inflows. When the authorities attempted to suppress interest rates even as adhering to the managed exchange rate regime (not possible), capital outflow broke out. Devaluation ensued; numerous banks with high open positions fell insolvent and credit crunch and financial contraction could not be prevented.

Alper C., et(2007) made a study forecasting structure of interest rate and they suggest further research include the investigation of efficiency of the yield spread in predicting Turkish real GDP growth . Testing whether interest rates move correlated across maturities may be useful to verify the validity of expectation hypothesis. Also a study on the effects of changes in monetary policy on interest rates with different maturities may be conducted to inquire the channels of the monetary transition mechanism in Turkey In line with analysing the Turkish Banking Sector's Asset Decomposition Saltoglu B. (2012) discussed, the dominant asset class in the Turkish banking sector is the loan portfolio, which is around 60 % of all assets. Total securities in the Turkish banking sector on their hand, (which consists of available for sales' trading portfolios and investment portfolios) is only around 25 % of its total assets. This asset class in the past was much higher while the loan portfolio was strictly lesser. Normally, the higher the loan portfolio in the banking sector, the stronger the link is between the finance and the real side of the economy. Therefore following the crisis, the banking sector has been more helpful in the normalization of the Turkish economy where the deposits are used to finance the financial needs of the private sector. While the share of securities is decreasing in the balance sheets, the share of loans is growing rapidly. In the latest statistics of 2012, total loans to total assets ratio is around 60 %, which was 30 % in 2002. This is because; the steadily decreasing public sector borrowing requirements has reduced the profitability of T-bills and bonds investment. With the help of local and global developments, the Turkish treasury could apply a new public debt policy, which caused the interest rates to be significantly lesser than crisis period. Consequently, the supply of credits given by banks has gone up. At the same time, relatively cheaper borrowing costs caused the demand for loans to grow rapidly. It is interesting to note that, while growth of the loan portfolio of banks has gone up sharply, the credit risk of the banks' loan portfolios was still controllable. It is also important to note that during the 2001 crisis, NPL ratios were around 40 %. In the recent years, NPL ratios have come down steadily. As of 2012, Turkish NPL ratio is around 3 %, which is very low compared to Turkish banking capital levels.

In related to Capitalization in the Turkish Banking System Saltoglu B. (2012 As discussed before, banking reforms after the 2001 financial crisis enabled a better bank

capitalization, which was very useful for the Turkish banking sector to avoid the effects of the recent global crisis. The Turkish banking supervisory authority, BRSA, required higher minimum capital requirement standards than many countries. For instance according to the BRSA, Turkish banks were required to attain a minimum of 12 % capital adequacy ratio (CAR), while the global requirement was only 8 %. It is important to note that, as a response to the recent global crisis, the new financial regulations known as BASEL III rules will require the minimum CAR to be gradually increased.

## 5. Summary and Conclusion Declare Opportunities and risks in the Turkish Banks

In briefly conclusion and from the above display of historical turkey banking system is obviously clear that we can imply the main problem in banking sector is interest rate and exchange currency rate or inflation. Participation banks (Islamic banks) prevent this interest rate and inflation problem by substitute new instruments depending on real participation which called lost and profit sharing (LPS).

The important points related to banking sector in turkey summarized by Saltoglu B. (2012) who argued about the Turkish growth rate is very sensitive to global situations. If the global economies begin to grow, Turkey will grow a lot quicker than others. On the contrary, as the world economy slows down, the Turkish economy will reduce plenty extra sharply than other emerging economies. The cause of this excessive growth volatility is associated with the structure of the Turkish economic system. Initially, the Turkish savings rate is very low, causing the economy to be faced with a scarce supply of local investment. Due to the fact local funds are not sufficient, regular capital inflow of capitals should for the economic system to develop. This unique situation forces the economy to have a heavy dependence on international funding. The short maturity of the banking deposits in the Turkish economy further reasons the banking sector to rely upon international funding.

Obviously, heavy dependence on the worldwide capital flows may also direct the Turkish banking sector to a riskier route. Those structural weaknesses may also require that future banking supervision and financial policy be described in another way than what was studied at some stage in the post crisis framework. In particular, during an international crisis, heavy reliance on foreign funding may be risky in spite of the policy actions taken with the aid of the authorities. Therefore, the future state of the banking supervision in Turkey must be designed to consider the future macroeconomic environment. Regulatory responses

for increasing interest rate risk and credit risk must be studied proactively. Linkages of macroeconomic and banking sector dangers become more essential in the future. With the current domestic savings rate, it is hard to lower long term banking risk potentials. Extending the banking deposit periods will definitely assist to reduce the banking sector's maturity mismatch problem. Future success of the financial regulation relies upon on the answer of these important problems. Therefore, the future macroeconomic and monetary situations require different perspectives for banking rules. With the given structural macroeconomic troubles, the banking sector regulations have to be designed to proactively tackle the reflections of future financial uncertainties at the Turkish financial system.

Increasing the capital adequacy ratio in good times and creating a liquidity buffer on the Turkish banking sector were proactive and helpful decisions taken by the Turkish financial authorities. Despite all these successful implementations, financial and regulatory improvements, more structural adjustments are necessary to have a more robust financial system. Particularly, increasing the amount and the quality of the domestic savings rate and diversifying the local funds.

Another important point Also presented by Talatar E. , Talatar F. &Ratti R. (2003) who declare a reasonable clarification of the relation between the term structure of interest rates and changes in inflation. Political instability and consequent frequent exchange in economic and fiscal regulations and stabilization regimes. The intercept coefficient in the relationship among alternate in inflation and time period structure of interest rates is observed to be time-varying, implying that predicted actual interest rates and risk premium among maturities vary over time. His model implies regime alternate at times consistent with dates of massive economic and political uncertainty in Turkey. Several stabilization programs have addressed the problem of high inflation in Turkey over time, but all have failed in reducing inflation to acceptable rates. To attain stability Turkey requires implementation of credible structural reform of the tax and expenditure systems to remove the public sector borrowing requirement which is a main reason in affecting interest rate in loans and in sequence inflation of local currency, credit, and liquidity crises in fiscal sector in turkey.

In theory, Islamic banks or named participation banks have several instruments with lost/profit sharing properties. Eliminate or prohibit interest rate. It just needs awareness and trust from customers to support this kind of dealing. As it need more researches and education at universities to activate and spread these cultures in all society in turkey.

## 6. Results and Analysis

### Pooled OLS

Regress AP ACC BCC BRM ARM

Table 1

Source	SS	df	MS	Number of obs = 176 F(4, 171) = 17.31
Model	195.058118	4	48.7645296	Prob > F = 0.0000
Residual	481.654545	171	2.81669325	R-squared = 0.2882 Adj R-squared = 0.2716
Total	676.712664	175	3.86692951	Root MSE = 1.6783

AP	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ACC	-.1565245	.0568822	-2.75	0.007	-.2688061	-.0442428
BCC	-.0099204	.0592057	-0.17	0.867	-.1267885	.1069476
BRM	.0094336	.0057502	1.64	0.103	-.0019169	.0207841
ARM	.1081025	.0140606	7.69	0.000	.0803478	.1358572
cons	2.065281	.74701	2.76	0.006	.5907322	3.539829

The (pooled) OLS is a pooled linear regression without fixed and/or random effects. It assumes a constant intercept and slopes regardless of group and time period. This pooled OLS model fits the data well at the .05 significance level ( $F=17.31$  and  $p<.0000$ ).  $R^2$  of 0.2882 says that this model accounts for 29 percent of the total variance in the total AP of banks. The regression equation is, OLS:  $AP = \beta_0 + \beta_1 ACC + \beta_2 ARM + e$ :  $AP = 2.07 + (-0.16 \text{ ACC}) + (0.11 \text{ ARM})$

Even in case of zero ACC and zero ARM, each bank is expected to have 2.07 units of total AP ( $p < .006$ ). For one unit increase in ACC, the total AP of banks is expected to decrease by (-0.16) units, holding all other variables constant ( $p = .007$ ). Whenever ARM increases by ten units, the total AP will increase by 1.1 units, holding all other variables constant ( $p < .001$ ).

Although this model fits the data well, you may suspect if each bank or year has different initial performance. That is, each bank may have its own initial performance, its Y-intercept, that is significantly different from those of other banks. What if you believe that error terms vary across banks and/or year? The former question suspect fixed effects.

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