

# “The Determinants of Foreign Bank Entry to the Turkish Banking Sector”

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## ARTICLE INFO

Mete Bumin (2007). The Determinants of Foreign Bank Entry to the Turkish Banking Sector. *Banks and Bank Systems*, 2(4)

## RELEASED ON

Tuesday, 04 March 2008

## JOURNAL

"Banks and Bank Systems"

## FOUNDER

LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

0



NUMBER OF FIGURES

0



NUMBER OF TABLES

0

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## The determinants of foreign banks entry to the Turkish banking sector

### Abstract

The foreign banks increased their investments in the Turkish banking sector after 2000. The factors behind these foreign investments are the rehabilitation of the sector after adopting the banking sector restructuring program and increasing the standards of regulation and supervision of the banking sector. The improvements in the macroeconomic indicators of the Turkish economy, the process of the European Union accession and positive expectations about Turkish economy also contribute to the foreign investments in the banking sector. In this study the determinants of the increasing share of foreign banks in the Turkish banking sector are investigated between the period of January 2003 and June 2006. The economic integration between Turkey and a home country of foreign banks, profit opportunities in the Turkish banking sector and macroeconomic indicators of the Turkish economy are tested to investigate the determinants of foreign investments. The empirical analysis shows that the profit opportunities in the Turkish banking sector is the main factor of increasing the share of foreign banks between 2003-2006. The potential growth of the Turkish economy, expected high demand for the banking services and higher profit ratios of the banking sector attract foreign banks to invest in the Turkish banking sector.

**Keywords:** banking sector, foreign direct investment, foreign bank entry.

**JEL Classification:** D53, G21.

### Introduction

The increasing trade volume between countries and foreign direct investments, the removal of barriers for investments by foreign banks under the process of financial liberalization and the progress in technology increased the importance of foreign banks during the recent period. As a result of investments by the banks, operating in developed countries to the banking sector of the developing countries, which strongly need external funds, the share of foreign banks in the banking sectors considerably increased in such countries.

Although foreign banks have been operating in the Turkish banking sector for a long time, their share in total assets had remained quite limited until the recent period. Upon financial liberalization policies adopted in the Turkish economy in 1980's, the foreign banks entry into the Turkish banking sector increased, and such banks concentrated on financing of foreign trade and raising foreign funds through their branch offices and affiliates. The Turkish banking sector reached a more improved structure as a result of the Banking Sector Restructuring Program, which was implemented after the economic crises in 2000 and 2001. The improvement of the basic indicators of the Turkish economy and positive results of implementation of restructuring program attracted the foreign investors towards the Turkish banking sector. The foreign investors considerably increased their shares in the sector by acquiring the shares of the banks operating in the Turkish banking sector. The share of foreign banks in the Turkish banking sector increased to 23,7% as of June 2006, while it was about 4,7% as of January 2003.

Given the increasing importance of foreign banks, this study will try to determine the factors encouraging the foreign investors to invest in the Turkish banking sector during the period between January 2003 and June 2006. The study is organized as follows: Section 2 describes the activities of foreign banks in the Turkish banking sector and the recent bank purchases. Section 3 summarizes the literature on the foreign bank entry. Section 4 defines the model established to identify the determinants of increase in the share of foreign banks. Section 5 describes the data and methodology of the model. Section 6 analyzes the empirical results of the model, and finally Section 7 concludes.

### 1. Foreign banks in the Turkish banking sector

Having initiated their operations in Turkey in the late 19<sup>th</sup> century, the operations of foreign banks remained limited until 1980's. The economic policies introduced by that period were aimed at integration of the Turkish economy with the international financial system. With the process of financial liberalization, the barriers to the entry of foreign banks were eliminated and regulations aimed at encouraging the foreign direct investments were introduced. The increasing importance of banking in the Turkish economy as well as the incentives offered to foreign direct investments accelerated the entry of foreign banks to the Turkish banking sector after 1980's. The economic growth and financial liberalization made banking sector a profitable field, therefore the foreign banks increased their investments in Turkey in order to acquire a share in such profit. The foreign banks generally selected to organize by opening branches during that period, and mostly focused on wholesale banking to serve their corporate customers.

Based on the data provided by the Banks Association of Turkey, the number of foreign banks operating in Turkey increased to 21 in 2000, while it was only 4 in 1980. Looking at the ratio of the number of foreign banks to the total number of banks operating in the sector, this ratio increased to 26% in 2000, while it was 9% in 1980. Despite the increase in the number of foreign banks, the share of total assets of foreign banks in the total assets of the banking sector remained lower during the same period. The total assets of the foreign banks represent 5,4% of the total assets of the banking sector, while the number of foreign banks represents 26% of the total number of banks in 2000.

The Stability Program introduced in 1999 to overcome the problems of the Turkish economy failed and Turkish economy experienced crises in November 2000 and February 2001. The banking sector suffered the interest risk during November 2000 crisis and exchange rate risk during February 2001 crisis, and their balance sheets faced significant losses. Another factor contributing the losses of the banks was the macroeconomic fluctuations leading to insolvency of companies and increasing non-performing loans of the banks. "Banking Sector Restructuring Program" was introduced in May 2001 to make the banking sector more stable, which faced considerable losses due to the experienced shock, and to overcome the problems permanently. The program consisted of four main components.

After restructuring of public banks, the first component of the program, the capital structure of the public banks was strengthened, their receivables for losses from activities were paid out from the funds provided by Treasury, and these banks underwent an operational restructuring. The second component of the program is the resolution of the banks transferred to Savings Deposit Insurance Fund (SDIF). The banks transferred to SDIF before and after 2000 and 2001 crises were restructured by funds provided by Treasury, a part of such banks sold to local and

foreign investors and remaining part resolved by merging and liquidation. Recapitalization by own funds of privately-owned deposit banks that suffered from the crises is the third component of the program. The last component of the program is the regulatory measures aimed at strengthening the supervision capacity of the sector and compliance with international standards.

The reforms and progress achieved under the Banking Sector Restructuring Program introduced after the crises experienced in November 2000 and February 2001 made the Turkish banking sector attractive for the foreign investors. Stable growth of the banking assets, increases in the loan volume and high profit rates compared to the developed countries' banking sector attract the foreign investors to invest in the Turkish banking sector. The improvements in the supervision system and the regulatory framework made positive contribution to increase in investments. Besides these factors specific to the banking sector, the progress achieved in the Turkish economy also influences this process. The improvement and stability achieved in macroeconomic indicators of the Turkish economy, decrease in inflation to the single-digit rates, high and uninterrupted growth all accelerate the foreign investments. Initiation of negotiations for accession to the European Union (EU) leading to positive expectations for the future also orient the foreign investors towards the Turkish banking sector.

The shares of many Turkish banks have been purchased by foreign investors from 2001, in which restructuring of the Turkish banking sector initiated until June 2006. During that period, the shares of 12 banks were sold to the foreign investors with the total value of 10,5 billion USD. The information about the banks purchased by foreign investors is summarized in the table below. The share of foreign banks in Turkish banking sector increased from 4,7 % in January 2003 to 23,7% in June 2006 as a result of these purchases.

Table 1. Banks purchased in the Turkish banking sector by foreign investors between 2001-June 2006

Bank sold	Share (%)	Purchaser	Country of purchaser	Date of sale	Amount of sale (mil. \$)
Demirbank	100	HSBC Plc	England	September 2001	350
Sitebank	100	Novabank	Portugal	December 2001	3
Kocbank	50	UniCredito	Italy	May 2002	240
T.Ekonomi Bankasi	42,1	BNP Paribas	France	February 2005	217
Disbank	89,3	Fortis	Holland-Belgium	April 2005	1.141
Garanti Bankasi	25,5	GE Finance	United States	August 2005	1.556
Yapi Kredi Bankasi	57,4	UniCredito	Italy	September 2005	1.395
C Kredi Kalkinma	57,5	Bank Hapoalim	Israel	December 2005	113

Table 1 (continued). Banks purchased in the Turkish banking sector by foreign investors between 2001-June 2006

Bank sold	Share (%)	Purchaser	Country of purchaser	Date of sale	Amount of sale (mil. \$)
Finansbank	46	Nati. Bank of Greece	Greece	April 2006	2.323
Tekfenbank	70	EFG Eurobank	Greece	May 2006	182
Denizbank	75	Dexia	France-Belgium	May 2006	2.437
Sekerbank	33,9	Bank Turan Alem	Kazakhstan	June 2006	254

## 2. Literature review

The studies on foreign banks consist of the studies aimed at determining the effects of foreign bank entry on local banking sector, loan policies of foreign banks and their role in financial crises, and the determinants of foreign bank entry, considering the data from one or more countries.

The studies examining the effects of the foreign bank entry on local banking sector generally focus on the changes in the profitability and effectiveness of the local banking sector that the foreign banks would introduce. Claessens et al. (2001), using 7.900 data for the period of 1988-1995 pertaining to the banks operating in 80 countries, revealed that foreign bank entry decreased the profitability of the local banks and adversely affected the non-interest income and total expenses of local banks. Bayraktar and Wang (2004) concluded that the foreign bank entry significantly varies among the countries, that it has nothing to do with average income level and growth rate of the countries, and further that the process of financial liberalization had an effect on the performance of local banks. Uiboupin (2004) examined the effects of the foreign bank access on the banking sectors of 10 Eastern European countries and revealed that the foreign bank entry adversely affected interest and non-interest income and stability of the banks operating in such countries, but made their banking sectors more competitive.

There are many studies examining the effects of foreign banks entry on the banking sector and local banks on the country basis. Kim and Lee (2004) for South Korea, Havrylchyk (2006) for Poland, Majnoni et al. (2003) for Hungary, Unite and Sullivan (2001) for Philippines and Barajas et al. (1999) for Colombia examined the effects of foreign bank entry on the local banks operating in the banking sectors of these countries respectively.

Many other studies examining the effects of foreign banks entry on the loans were aimed at determining the effect of foreign bank entry on the loan volume and finding an answer to concentration of the loans on certain groups of customer. Dages et al. (2000), examining the local loaning policies of foreign banks operating in Argentina and Mexico, revealed that the

foreign banks in both countries achieved a stronger growth in loans compared to the local banks during the period under examination and contributed the stability of loaning in the financial system, and concluded that the financial standing rather than ownership structure of the banks played a critical role in growth, variability and seasonality of bank loans. However, the most recent study by Detragiache et al. (2006) examining the effect of foreign bank entry on the development of financial sectors of poor countries determined that the foreign bank entry benefits high-end customers as the foreign banks have better relations with such customers compared to the local banks, and worsen the conditions of remaining smaller customers, which has limited financial transparency and limited ability to access loans.

There is a wide range of literature examining the relationship between foreign bank entry and financial stability, and the behavior of foreign banks during the periods of financial crisis. It is recognized that the foreign banks play, before and during crisis, a role of reducing the negative effects of the crisis. The foreign banks have international and well diversified liquidity capabilities compared to the local banks, and can be supported by their home countries respectively during the crisis periods (Detragiache and Gupta, 2002). Demirgüç-Kunt and Detragiache (1998) checking the other variables, which are liable to cause a financial crisis, revealed that the presence of foreign banks minimized the possibility of crisis and positively influenced the growth rates. Tschoegl (2003) determined that the foreign banks played major roles in rehabilitation of problematic banks in the process of post-crisis restructuring of the banking sector and implementation of economic reforms. When comparing the foreign banks to local banks regarding their loaning behaviors during crisis periods, the foreign banks are found not to reduce the loans considerably. In Malaysia, examined by Detragiache and Gupta (2002) after Asian crisis, it was determined that the foreign banks did not select to reduce the loans they provide during the crisis period, and increased their shares in Malaysian banking sector during that period.

The studies aimed at analyzing the determinants of the foreign bank entry concentrate on the factors

orienting the foreign banks to invest in certain countries. Based on the conclusion reached from the study by Focarelli and Pozzolo (2002) examining the factors affecting the decisions on foreign investment of 260 major banks operating in OECD countries, it was determined that the most important factor finalizing the foreign investments of the banks is the profit opportunities in the banking sector of the country to be invested in, that the expected growth rate of the banks is high, and that they invest in countries where the banking sector is effective less than average. Wezel (2004) researched the factors determining the decisions of international German banks for investments in Asia, Latin America and Eastern European countries between 1994-2001, and concluded that the non-banking foreign direct investments, improved banking market of the host country and low country risk are the indicative reasons of foreign investments by the German banks.

Another study, in which the factors determining the foreign direct investment in services sector revealed that the most important factors determining the foreign direct investment in the financial services sector are the national income per capita of the host country and the foreign direct investment achieved in other service sectors, and that the growth rate, trade volume, inflation and other social-political factors have no indicative effect on foreign direct investment in the financial sector based on the data pertaining to 57 countries for the period between 1989-2000. According to the findings of the study by Kolstad and Villanger (2004) aimed at determining the reasons of entry by the foreign banks of 22 different countries in the Italian banking sector for the period between 1983-1998, it was determined that the difference in interest rates between the home country of the investing banks and Italy positively affected the foreign bank entry, and the integration between countries affected the decision of entry and intensity of the activities of foreign banks (Magri et al., 2005).

The number of studies examining the effects of foreign bank entry on the local banks operating in the Turkish banking sector and the determinants of investment by foreign banks is quite limited. Denizer (1999) examined the effect of the foreign bank entry on the financial sector, which forms one aspect of the process of financial liberalization initiated in Turkey in 1980's, and concluded that the foreign banks had a significant competitive effect on the Turkish banking sector although their share in the banking sector was low, and the foreign bank entry decreased the asset profitability. Pehlivan and Kirkpatrick (1992) determined that the foreign bank entry upon removal of restrictions under the process of financial liberalization initiated in Turkey in 1980's did not provide the

expected improvement in the performance and cost effectiveness of the local banks.

### 3. The model

Given the increasing share of foreign banks in the Turkish banking sector, this study will try to determine the factors leading the foreign investors to invest in the Turkish banking sector during the period between January 2003 and June 2006 empirically by using the multiple regression method.

The dependent variable (FSH) of the model is determined to be the percentage share of total assets of foreign banks in the total assets of the Turkish banking sector. Number penetration and share penetration measure are used in determining the share of foreign banks. Claessens et al. (2001) determined the share of foreign banks based on the number penetration measure and considered the ratio of total number of foreign banks operating in the national banking sector to the total number of banks. However, Bayraktar and Wang (2004) used share penetration measure indicating the share of the total assets of foreign banks in the total assets. Share penetration measure is preferred in this study and the model considered the shares of the assets of foreign banks in the total assets of Turkish banking sector for 42 monthly periods during the period between January 2003 and June 2006.

Reviewing the studies carried out, the factors determining the trends of banks to invest in abroad could be classified under three main headings. The first factor is the banks wishing to follow their customers they serve in their home country and serve them in abroad when such customers invest in such foreign countries. This factor closely determines the degree of economic integration between the home country of the bank investing in abroad and the host country being invested in. The second factor determining the foreign investment by banks is the profit opportunities offered by the banking sector of the country to be invested in. Decrease in the profit rates in local markets leads the banks to invest in abroad. The banks select the investments that would provide them with the maximum profit in future, and enter the banking sectors of the countries where such investments are available. The macroeconomic data and future expectations of the country to be invested in are the third group of factors determining the foreign investment by the banks. The banks closely monitor the changes in macroeconomic indicators, which are liable to directly affect the income level of their investment, and direct their investments based on such data.

This study will try to determine the factors causing the increase in the share of foreign banks in the Turkish banking sector by independent variables to be

selected under the headings of economic integration, profit opportunities and macroeconomic indicators, considering the abovementioned classification.

The intensity of commercial relations and investments between the countries leads the bank to serve their customers in abroad. The banks invest in the countries where the customers they serve in their home country invest in, in order not to lose their customers and compete with foreign and local banks operating in such countries. The increase in the volume of mutual trade also leads the banks playing an important role in financing of trade to invest in abroad. In this context, 2 independent variables have been established under the heading of economic integration as trade volume between the countries and non-banking foreign direct investment.

Increasing the trade volume between the countries makes the financing of foreign trade, which is among the basic functions of foreign banking important and profitable, and leads the banks to invest in abroad. Many studies aimed at determining the reasons of foreign bank entry used the mutual trade volume as an independent variable, and established a positive correlation between the mutual trade volume and shares of foreign banks. Buch (2000) examining the German banks, Goldberg and Johnson (1990) examining the US banks and Moshirian (2001) examining the British banks regarding their foreign investments respectively established a positive correlation between said variables. However, Miller and Parkhe (1998) established a negative correlation between the number of branch and total assets of the US banks in abroad and the trade volume between the host country and the US. The independent variable (TRA) used in this study is the ratio of the total export and import between Turkey and 7 countries, which are the home countries of the banks investing in the Turkish banking sector for the period between January 2003 and June 2006 to the total foreign trade volume of Turkey for the same period.

Increasing the volume of non-banking foreign direct investments is also among the factors describing the share of foreign banks. The banks extend their operations towards the countries where the companies of their country of origin make foreign direct investments. As mentioned before, if such company is the customer of the bank, then the bank enters the country, in which its customer invested, not to lose its customer in the home country and to serve it in abroad as well. Buch and Lapp (1998), Yamori (1998) and Williams (1998) established that the non-banking foreign direct investment is an important factor determining the shares of foreign banks. Moshirian and Van der Laan (1998) found a negative correlation between the foreign assets of the US,

British and German banks and non-banking foreign direct investments of the same country of origin. The independent variable (FDI) used in this study is the non-banking foreign direct investments under the principle of following the customer. The ratio of the total amount of non-banking foreign direct investments in Turkey from 7 countries, which are the home countries of the banks investing in the Turkish banking sector for the period between January 2003 and June 2006 to the total non-banking foreign direct investment in Turkey for the same period, is included in the analysis by monthly periods.

The profit opportunities in the banking sector of the country invested in seems to be the most indicative factor for the decision of investment by the foreign banks. Particularly the banks from developed countries direct their investments towards the banking sectors of the countries offering higher profit opportunities in cases where the profit rates in the banking sectors in their home countries reach to saturation and decrease below a certain level. Many studies examining the correlation between the profit opportunities in the banking sectors of host countries and the foreign bank entry reached to different conclusions. Fisher and Molyneux (1996) and Yamori (1998) showed that the banks tend to invest in countries offering higher profit opportunities and having stable economies. Claessens et al. (2001) determined that the banking sectors with low tax rates are more attractive to the foreign investors. Nigh et al. (1986), examining the investments by the US banks in 30 developed and developing countries, revealed that the profit opportunities offered by the host country have a minor effect on the foreign bank entry. Miller and Parkhe (1998) established that the correlation between the foreign bank entry and the level of development of the financial market being invested in is positive for developed countries and negative for developing ones.

This study considered the return on asset (ROA), which is primarily the standard measurement of profit for determination of the effect of profit opportunities in the banking sector on the foreign entry as the independent variable. Considering that the loans are the most important item of the banking assets, it is recognized that the loan volume is an indicative factor for the profit, and the share of loans in the total assets (LOA) is considered an independent variable. De-tragiache et al. (2006), examining the effects of foreign entry on the banking sectors of low-income countries used the loan volume as independent variable. Many studies such as Claessens et al. (2001), Bayraktar and Wang (2004) and Cakar (2003), included the ratio of net interest margin to profit before tax (NIM), which is used as a criterion for profitability of the banking sector as an independent variable.

In addition, the ratio of net interest margin after provisions to the total assets (CBP) measuring the consumer banking profitability, which is used by Focarelli and Pozzolo (2002) is added among the others, as an independent variable.

The fluctuations in macroeconomic indicators of the countries, in which the banks invest, have a significant effect on their investments. The periodic crises experienced by national economies cause decrease in the proceeds of the investments, and decrease the expected profit. Therefore, the banks consider the macroeconomic indicators of the countries to be invested in while making a decision for foreign investment, and invest in countries where future expectations are positive. One of the important indicators determining the financial depth of the economy of the country to be invested in is the ratio of the banking assets to the gross national product (GNP). The size of the banking sector assets offers the investing banks a larger market and cost-effective operations. The study by Claessens and Glaessner (1998) on foreign bank entry to the banking sectors of East Asian countries used said ratio as the independent variable. The national income of the country to be invested in is also an important factor determining the foreign entry. Higher national income indicates higher purchasing power and demand for banking services of individuals. Yamori (1998) and Goldberg and Johnson (1990) determined that the Japanese and the US banks respectively invest in countries with high national income per capita. However, Sagari (1992) suggests that the market size measured by the size of gross national product has no positive effect on the foreign investment by the US banks.

In the study, the ratio of the total banking assets to the GNP (FDP) and the growth rate (GRW) are used as independent variables. As the GNP growth rates are published quarterly, the percentage change in the monthly industrial production index with respect to that for the same month of the previous year is considered as the growth rate. In addition to the above mentioned variables, the inflation rate (INF), which is a basic macroeconomic indicator having a significant effect on the bank profitability and used in many studies is used as an independent variable for the purpose of determining the effects of macroeconomic indicators on the foreign bank entry. Any possible fluctuations in said variable seem to substantially affect the proceeds of the investments by foreign banks. The study considered the monthly percent change in consumer price index as the inflation rate.

#### 4. Data and methodology

The data contained in various resources are used for the dependent and independent variables of the empirical model for determining the reasons of increas-

ing foreign share in the Turkish banking sector. The shares of foreign banks assumed as the dependent variable are calculated over the total assets for 42 monthly periods between January 2003 and June 2006 of commercial banks admitting deposits included in the Monthly Bulletins of Banking Regulation and Supervision Agency (BRSA).

For the variable of trade volume under the heading of economic integration forming the first group of independent variables, the monthly export and import data published by Turkish Statistical Institute (TUIK) are used. The monthly export and import figures between Turkey and France, Italy, Belgium, Holland, USA, Greece and Kazakhstan which are the countries of origin of the foreign investors purchasing shares of the banks as well as the total export and import figures of Turkey are considered for monthly periods during the given interval. For the variable of non-banking foreign direct investment, the monthly data provided by the General Directorate of Foreign Capital of the Undersecretariat of Treasury are used, and the stock figures of the investments other than the investments in Turkey by sector "activities of financial intermediation" from said countries are considered the amount of non-banking foreign direct investment. The same source is referred to in determining the total amount of non-banking foreign direct investment in Turkey, and the data pertaining to the respective terms are calculated using the monthly data.

Considering that all of the independent variables determined to measure the profit opportunities in the banking sector pertain to the balance sheets and income statement of the banks, the monthly balance sheets and income statements of the banks included in the Monthly Bulletins of BRSA for 42 periods between the term January 2003 and June 2006 are used in the model for said variables. The data provided by TUIK are used for GNP, industrial production growth rate and consumer price index among the data pertaining to macroeconomic indicators.

The following model is established using multiple regression method to test whether the increase in the share of foreign banks in the Turkish banking sector could be explained by the variables under the main heading of economic integration, profit possibilities and macroeconomic indicators or not:

$$\Delta FSH_t = \alpha + \beta_1 \Delta TRA_t + \beta_2 \Delta ROA_t + \beta_3 \Delta LOA_t + \beta_4 \Delta CBP_t + \beta_5 \Delta FDP_t + \beta_6 \Delta INF_t + u_t.$$

Among the independent variables, the data pertaining to the variables of non-banking foreign direct investment (FDI) and growth rate (GRW) are not included in the model as they show large fluctuations during the period under examination, and the variable of net interest margin (NIM) is also not included in

the model as the net interest margin is used in determining the consumer banking profitability.

Some issues are considered to obtain meaningful statistical results from the model as the data pertaining to dependent and independent variables included in the study features time series. Ratios are used by dividing dependent and independent variables by relevant values for the purpose of increasing the effectiveness of the coefficients of the variables and reducing the heteroscedasticity. In addition, White Test is applied to test the existence of heteroscedasticity in the model. The correlation between dependent variables and independent variables as well as between independent variables each other is checked and it is found that there is no multicollinearity between the variables. Augmented Dickey-Fuller unit root test is applied to each variable to test the stationarity of the data established in the form of time series. The variables bearing unit root as a result of said test are included in the model by taking their first difference. Various tests are applied to determine existence of autocorrelation in the model. The Durbin-Watson test is applied to test the existence of the first order autocorrelation, and the Breusch-Godfrey Lagrange Test to determine the existence of the second order autocorrelation.

## 5. Empirical results

The empirical results obtained by testing the model formed to examine the determinants of increase in the share of foreign banks in the Turkish banking sector using the multiple regression method are shown in the table below.

Table 2. Empirical results of the model

Dependent variable	Share of foreign banks (FSH)
Constant	- 0,00009 (-0,031)
TRA	- 0,30365 (-1,256)
ROA	0,27966 (0,362)
LOA	0,89767** (2,207)
CBP	-1,69649* (-1,708)
FDP	0,00581 (0,078)
INF	0,57507** (2,238)
Number of observations = 42	Durbin-Watson = 1,919
Adjusted R <sup>2</sup> = 0,179	Breusch-Godfrey LM Test = 3,480
F- Test = 2,455 (0,0044)	White Heteroskedasticity Test = 29,342

Notes: t-values are reported in parentheses. The symbol \*\* indicates a significant level of between 1 and 5 percent, \* between 5 and 10 percent.

The following conclusions are reached to test the variables in determining the reasons of increase in the share of foreign banks in the Turkish banking sector.

The trade volume between 7 countries, which are home countries of the banks investing in Turkish banking sector and Turkey under the main heading of economic integration, it is seen that there is no significant relationship between that variable and the dependent variable. The ratio of the total amount of export and import between said 7 countries and Turkey to the total trade volume of Turkey for the same period varies between 28% and 22% during the period under examination. The trade volume tending to decrease in the period during which the foreign bank share increased caused said variable to have a negative coefficient. Therefore, there is no significant relationship between increase in the share of foreign banks in Turkish banking sector and the degree of economic integration between the home countries of such banks and Turkey.

Among the variables under the profit opportunities in the banking sector forming the second main heading of the independent variables; a significant relationship is determined between the variables of loan volume and consumer banking profitability and the foreign bank share. The loan volume is found to be significant between 1 to 5% and the consumer banking profitability between 5 to 10%. No significant relationship is found between the return on asset, another variable under the heading of profit opportunities, and the dependent variable.

The regression coefficients of the variables of loan volume and consumer banking profitability differ. There is a negative correlation between the consumer banking profitability and the foreign bank share, and the variable of loan volume has a positive coefficient. The loan volume in the Turkish banking sector increased during the period under examination also contributed by high growth rates achieved by Turkish economy, and the loans became the most important item of the assets. The increasing loan volume during that period caused a positive correlation between said variable and foreign bank share. Decreasing profitability of the Turkish banking sector with decreasing inflation rates during January 2003-June 2006, which the model is established, appears to be the factor defining the negative coefficient of the variable of consumer banking profitability.

Among the variables under the heading of macro-economic indicators forming the third main group of independent variables; only the variable of inflation rate is found to be significant in explaining the foreign bank share. Inflation rate variable is found to be significant between 1 to 5%. As another variable

under the heading of macroeconomic indicators, the financial depth ratio, which is measured by the ratio of the total assets of the banking sector to GNP, fluctuated between 63% and 87% during the period under examination. According to the results of the model, no significant relationship could be found between said variable and foreign bank share in the banking sector.

## Conclusion

The foreign banks, having been existing in Turkey since the late 19<sup>th</sup> century, operated limitedly under conditions of the closed economic structure of Turkey until 1980's. As a result of open economic policies introduced during that period, entry of foreign banks to the Turkish banking sector increased. The number of foreign banks increased during the period of 1980-2000, but their share in total assets of the banking sector remained at about 5%. The achievements obtained as a result of the Banking Sector Restructuring Program introduced after the economic crises in 2000 and 2001 to make the banking sector more stable and overcome the problems permanently, made the Turkish banking sector attractive for the foreign investors. Increases in the loan volume, higher profit rates compared to developed countries' banking sector and regulatory framework as well as changed standards for supervision system all appear to be the factors leading the foreign investors to invest in Turkish banking sector. Improving

macroeconomic indicators of Turkish economy, high growth rates and decreasing inflation during said period as well as initiation of negotiations for accession of Turkey to the European Union and accordingly positive future expectations also contributed to this process.

Given the increasing shares of foreign banks, this study tried to determine the factors causing increase in the share of foreign banks in the Turkish banking sector during the period between January 2003 and June 2006. A model is established by the multiple regression method for the purpose of determining the relationship between the increasing share of foreign banks in the Turkish banking sector and the economic integration between Turkey and the home countries of investing foreign banks, the profit opportunities offered by Turkish banking sector and the variables for the macroeconomic indicators of the Turkish economy. According to the results of the model, it is determined that the profit opportunities offered by the Turkish banking sector affected the increase in the share of foreign banks, and that the variables of loan volume, consumer banking profitability and inflation rate are significant ones in explaining the increasing foreign bank share. The effect of foreign bank entry on the local banking sector and on local bank will be the topic of the subsequent studies after a few years to elapse over the operations of foreign banks.

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