Market Dominance and Competitiveness in Banking Sector and an Analysis of Turkish Banking Sector with Comparison to EU Banking Sector

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Abstract: It is of vital importance for the finance sector and its pioneering child, the banking sector, to boost and maintain competitiveness and market domination in a globalizing world. In the Turkish banking sector, a significant progress has been made with respect to making legal and institutional arrangements for regulatory and supervision authorities and implementing and auditing decisions taken within the context of harmonization with the EU. Due to increasing competition and rapid technological developments in the banking sector, financial products and services have been diversified and new strategies and policies have been implemented and rate of inflow of foreign capital has gathered momentum. It is noteworthy that the Turkish banking sector has an oligopolistic structure and it has ratios similar to the banking ratios of the developing countries that are EU members. Moreover, it is obvious that the Turkish banking system is more robust than transition economies.

Keywords: Banking, EU, competitiveness

Introduction

Competition is the focal point of free market economy while competitiveness is an essential mechanism for boosting efficiency, effectiveness and social welfare. In addition, securing market dominance plays an important role in ensuring lucrativeness of businesses.

The study focuses on the factors affecting competitiveness and market dominance of the banking sector that has entered international markets upon financial liberation and runs a structural comparative analysis between the Turkish banking sector and the banking sectors of the selected EU members countries grouped according to their economic development.

1. Theoretical Framework for Competitiveness and Market Dominance

1.1. Concepts of Competitiveness and Market Dominance and Factors Affecting Them

In economic terms, competition can be defined as the ideal environment in which economic activities pursued by any person or firm are not restricted by other persons or firms and can been conducted in an effective manner. Competition is an endeavor for survival and maintaining and improving one's existence and it entails adopting a strategic mindset and adopting certain strategic analyses and conscious application rules.

The ability of firms to influence the market and market prices is reliant on the level of competition in that market (Lipsey, Steiner&Purvis 1987). The higher is competition in a particular market, the less is the likelihood of individual firms to have any affect on that market and the prices that originate in that market. While price competition is the evident form of competition, non-price competition has come to be used more effectively today. In price competition, firms compete with each other by making discounts in the price of their products through several methods --monetary wages, profit, efficiency, changes in exchange rates, etc. In non-price competition or product competition, firms try to distinguish their products from competing products on the basis of quality of the product or other services for consumption of the product(Kılınç 2008&Erkan 1987).

For creating a good environment for competition, the following criteria must be fulfilled:

- Entries to, and exits from, the market should be free.

- Firms should be free in conducting their trade and making deals.
- There should be an effective monetary system in place.
- Markets should be transparent. Buyers and sellers should have thorough knowledge of the market.
- Restrictions on trade should be abolished.
- Buyers and seller should act rationally to maximize their profits(Lachman 1999).

Competition naturally gives rise to the concept of competitiveness. Competitiveness is a comparative measure and it specifies the position of sectors and countries with respect to each other. Competitiveness can be defined from two perspectives: at micro (firms and sectors) and macro (country) levels. In the former case, competitiveness signifies the ability of a firm to produce its products at lower costs and for lower prices compared to its rivals in the national or global markets; it also implies that this firm is capable of producing better quality and more attractive products and it can produce new products at lower costs and perform better in international trade. In the latter case, competitiveness refers to the ability of a county to compete with other countries with respect to quality and prices of its products, maintain a good balance of foreign trade, increase production, income and efficiency and improve living standards and employment in the country(Aktan&Vural 2004).

There are two basic factors that affect competitiveness of firms: efficiency and cost advantage. In a sense, efficiency means obtaining higher output with lower input. In this regard, competitiveness can be defined as the ability to increase efficiency. Cost advantage is the ability to minimize the costs related to a product or service without degrading --or even by improving-- its quality. For Porter (1990), countries obtain competitiveness by using their resources optimally(Ucal & Gürsoy 2008).

When the process of competitiveness is taken into consideration in transition from traditional economy to new economy, one can discern that competitiveness relies first on large production and low cost and then on product and market expansion, on quality and speed, and finally on value creation(Özkara1997 &Aktan and Vural 2004).

1.2. Competitiveness and Market Dominance in Banking Sector

The finance sector and the banking sector need to boost and maintain competitiveness on a global scale in order to increase welfare.

Market shares of banks (sector's rate of concentration) and barriers to market entry show the level of market power. The banks having monopolistic power in the banking sector will create loans in fewer numbers but with higher interest rates and with an immense volume while offering lower interest rates to deposits. This will in turn disrupt flow of capital to efficient areas, undermining capital accumulation and adversely affecting economic growth. Moreover, high volume loans will decrease portfolio diversification with added risk of crippling the financial structure of the bank. On the other hand, in a banking sector characterized by intense competition, interest rates will be lower for loans and higher for deposits, lowering capital costs and boosting economic growth. In oligopolistic markets, banks take into consideration possible reactions from other banks in deciding their interest rates, commission and other fees. Due to lack of communication in oligopolistic markets, prices are set more according to attitudes of rivals than those of customers(Tunay, Uzuner &Yiğit 1998).

Increased competition leads to decrease in the number of reliable borrowers per bank, which in turn urges banks to conduct more thorough examination into loan applications. Banks tend to finance long maturity loans with short maturity deposits, thereby experiencing liquidity problems. Banks can avoid high credit risks only by maintaining more equity capital, applying capital adequacy requirements, using credit derivatives, decreasing interest risks, implementing low loan portfolios and using other risk minimizing measures. In the end, social welfare may deteriorate.

Barriers to entry to the banking sector, cartel agreements and recently increased number of mergers and takeovers restrict competition. Measures that aim to create fair competition conditions in the banking sector are listed as follows:

- Auditing authorities must be independent.
- Entries to and exits from the sector must be free in order ensure that the number of the banks operating in the banking sector are optimal(Scoot & Dunkelberg 2008).
- Objective criteria must be set view to preventing unfair competition by restricting entries to the sector --or mergers or acquisitions-- that might lead to creation of big bank groups.
- Comprehensive legal arrangements -which encompass the entire financial sector, not only a banking law- must be implemented to ensure harmonization with the globalizing world(Scoot & Dunkelberg 2008).

Neven's study (1999) showed that liberalizations that have been going on since 1980s have made a considerably salient impact on competition (Neven & Roller 1999). Recently, banks have started to operate under intense competition from non-sector financial organizations and financial markets due to the increased liberalization and integration of the world's financial markets. Increased competition has urged banks to engage in insurance, private banking and asset management and other non-interest bearing operations (Hainz 2003). Banks are trying to adapt to the rapidly changing competitive environment through internal growth or merger and acquisition strategies with a view to benefiting from economies of scale. Many banks are seeking ways to diversify their income sources(Goddard, Molyneux, Wilson &Tavakoli 2007). However, when done between medium and big sized banks, mergers generally do not serve to increase efficiency because these banks are already making savings with their scales. In order to secure increase from scale savings, small banks should merge. Bikker and Haaf assumed that small scale banks operate on at local level while big banks are more competitive than other banks at the international level and medium sized banks can maintain a medium level of competition(Bikker & Haaf 2002). Moreover, the number of banks is treated as an indicator of competition level. Increase in competition at the banking sector leads to decreased cooperation(Hainz 2003).

The banks having big market shares obtain noncompetitive income(De Jonghe & Vennet 2008). For Dick, in particular, big banks secure market dominance by seizing demand surplus through quality intensive services(Dick 2007). Any increase in market share results in a fall in brokering costs(Maudos & De Guevara 2007).Stability was found to be higher in the banking systems with higher concentration rates and fewer restrictive regulations. Thus, reasonable competition is preferred(Berger, Klapper & Aris 2008).

When the European banking system having a strong structure is examined, it can be observed that recent technological developments, financial liberalization, ongoing economic and regulatory integration and impact of Euro transition have increased competition and effectiveness. On the other hand, since bank mergers and acquisitions decrease the number of rivals, this may have negative effects with respect to market domination(De Jonghe & Vennet 2008).

2. Structural and Comparative Analysis of Banking Sectors of Selected EU Countries vis-à-vis Turkey

2.1. Developments, Competitiveness and Market Domination in the Turkish Banking Sector in the Post-2001 Crisis Era

Post-2001 crisis recovery in the Turkish economy, increased economic stability, and the implemented anti-inflation program have positively affected the banking sector. Moreover, restructuring of the banking system has ensured that major structural problems which in the past created crises in the sector can be overcome. With consolidation and positive economic developments that occurred thanks to restructuring, the banking system has started to grow and reshaped its balance sheet structure. With increased demand for loans, the share of loans within assets has increased, and the share of securities portfolio with lower liquidity, and financial structure has been reinforced, and profitability performance has improved. As the Turkish banking sector has a big potential for growth and Turkey's EU membership process has accelerated, foreign capital has started to show increased interest in the sector and the direct investments by foreign investors in the Turkish banks and other financial organizations have increased.

The banking law (dated 2006) that regulates and directly affects banking activities has been harmonized with the EU legislation to a great extent. New arrangements have been made with respect to determination of institutional management rules for banks and measurement of liquidity adequacy(TBB 2007).

The year 2007 was a busy year for political and economic developments both in the country and in the international markets. With adverse developments around the world, no remarkable progress was seen in Turkey's EU membership process.

2.1.1. Market Structure in the Turkish Banking Sector

In the banking sector where a rapid process of consolidation was seen with acquired and closed down banks after 2000, the number of banks dropped down to 49 in December 2008. The number of branches continued to increase. The branch and employee numbers have decreased in the period 2000-2003 due to the structuring schemes, but started to increase afterwards.

Table 1. Bank and Branch Numbers

	2001		**2002**		**2003**		**2004**	
	Bank	**Branch**	**Bank**	**Branch**	**Bank**	**Branch**	**Bank**	**Branch**
Total	61	6,908	54	6,106	50	5,966	48	6,106
	2005		**2006**		**2007**		**Sep. 2008**	
	Bank	**Branch**	**Bank**	**Branch**	**Bank**	**Branch**	**Bank**	**Branch**
Total	47	6,247	46	6,849	50	8,040	49	9,036

Source: Derived from the Turkish Banks Association (TBB), (May 2008), *Bankalarımız 2007*, and the TBB, (September 2008), *3 Aylık Banka Bilgileri Raporu*.

Table 2. Overall Structure and Efficiency Indicators of the Banking Sector

Years	Employee Numbers	Total Assets (thousand TL)	Total Loans (thousand TL)	Total Deposits (thousand TL)	Deposits/Employee Numbers (thousand TL)	Employee Numbers/Bank Numbers
2001	137,495	216,507,617	57,341,438	147,520,532	1,073	2254
2002	118,329	212,675,488	56,370,271	142,387,988	1,203	2958
2003	123,249	249,749,773	69,990,148	160,812,250	1,305	2465
2004	127,163	306,451,565	103,241,145	197,393,862	1,552	2649
2005	132,258	381,639,902	148,641,794	244,633,655	1,850	2814
2006	150,793	484,857,262	218,063,925	312,832,244	2,075	3278
2007	167,760	561,171,879	280,453,091	356,983,744	2,128	3355
Sep2008	170,425	655,434,000	356,096,000	418,839,000	2,458	3478

Source: Derived from TBB, (May 2008), *Bankalarımız 2007*, and the TBB, (September 2008), *3 Aylık Banka Bilgileri Raporu*.

The total assets in the balance sheet of the banking sector increased to TL 655 billion ($565 billion) in September 2008 with a 16.8 percent increase. Increase in corporate and consumer loans supported growth in total assets(TBB 2008). Total credits in the banking sector reached TL 356 billion by the end of 2008, with the share of loans within total assets being 54.3 percent. The credit volume which was low to scale in the banking sector was a factor that reduced risk in the crisis period (Bilgin 2009). 26.4 percent of the total assets in the banking sector consist of securities. Since they are risk-free and liquid assets, the sector mainly prefer domestic government bonds (BDDK 2008).

Table 3. Balance Sheet Structure of Banking System (%)

	2001	2002	2003	2004	2005	2006	2007	Sep2008
Assets in TL/Total Assets	na	53.6	60.7	63.2	67.7	66.2	71.2	71.9
Liabilities in TL/Total Liabilities	na	49.6	56.7	59.9	64.3	62.4	66.7	66.8
Deposits in TL/Total Deposits	na	42.1	50.7	55.2	63.2	61.6	65.1	66.0
Credits in TL/Total Credits	na	42.4	53.7	63.5	70.5	72.7	74.9	74.0
Total Deposits/Total Assets	68.9	67.0	64.4	64.4	63.9	64.5	63.6	63.9
Credits Received/Total Assets	10.5	8.4	8.2	9.0	11.0	11.7	10.5	10.9

Source: Derived from TBB, (May 2008), *Bankalarımız 2007-2006-2005-2004-2003-2002-2001*, and the TBB, (September 2008), *3 Aylık Banka Bilgileri Raporu.*

The share of credits within total assets increased, due to falling interest rates after 2005, to 54.3 percent and the public sector borrowing requirement decreased, which caused the rate of conversion of deposits to credits to increase (85 percent), thereby boosting the contribution of the banking sector to the non-financial sector. Not only interest rates, but also creation of suitable maturity conditions were influential in this. Non-accruing (delinquent) loans decreased in the post-2001 crisis restructuring process, but they started to increase slowly --particularly with respect to consumer and commercial credits-- due to economic uncertainties in 2008.

Table 4. Asset Quality of Banks (%)

	2001	2002	2003	2004	2005	2006	2007	Sep2008
Financial Assets (Net)/Total Assets	35.0	40.5	42.8	40.4	36.0	34.7	31.3	28.7
Total Credits/Total Assets	21.9	26.5	28.0	33.7	38.6	45.0	50.0	54.3
Total Credits/Total Deposits	31.8	39.6	43.5	52.3	60.4	69.7	78.6	85.0
Delinquent Credits (Net)/Total Credits	19.9	6.6	1.4	0.7	0.5	0.3	0.4	0.5
Consumer Credits/Total Credits	-	13.3	23.5	27.2	29.8	31.2	33.3	32.6

Source: Derived from TBB, (May 2008), *Bankalarımız 2007-2006-2005-2004-2003-2002-2001*, and the TBB, (September 2008), *3 Aylık Banka Bilgileri Raporu.*

When the liquidity structure of the sector is examined, it can be seen that the share of liquid assets within total assets decreased over the years to 29.4 percent. This implies that the banks still choose to direct short term liabilities they assume not to liquid assets, but to the assets with lower liquidity.

Table 5. Liquidities of Banks (%)

	2001	2002	2003	2004	2005	2006	2007	Sep.2008
Liquid Assets/Total Assets	32.0	34.3	38.8	37.4	39.9	39.6	37.1	29.4
Liquid Assets/Short Term Liabilities	na	75.1	80.5	84.3	74.8	65.3	62.4	47.6
Liquid Assets in TL/Total Assets	na	12.9	19.0	17.6	22.7	21.3	23.1	17.9

Source: Derived from TBB, (May 2008), *Bankalarımız 2007-2006-2005-2004-2003-2002-2001*, and the TBB, (September 2008), *3 Aylık Banka Bilgileri Raporu.*

Despite the rapid growth of equity, the capital adequacy ratio (Equity/Value at Credit + Market + Operational Risk) deteriorated. This was attributable to the inclusion of operational risk to the capital adequacy calculation as well as the growth in trade volume. The capital adequacy standard ratio decreased from 30.9 percent in 2003 to 17.7 percent in 2008. The net balance sheet position/equity ratio was -15.9 percent in 2008 (TBB 2008).

Table 6. Capital Adequacy of Banks (%)

	2001	2002	2003	2004	2005	2006	2007	Sep.2008
Equity/(value at credit + market + operational risk)	na	24.2	30.9	28.8	24.2	22.0	19.1	17.7
Equity/Total Assets	9.0	12.1	14.2	15.0	13.5	12.0	13.1	12.2
Net Balance Sheet Position/Equity	na	-6.3	-2.5	-4.5	-5.1	-13.5	-14.0	-15.9

Source: Derived from TBB, (May 2008), *Bankalarımız 2007-2006-2005-2004-2003-2002-2001*, and the TBB, (September 2008), *3 Aylık Banka Bilgileri Raporu*.

2.1.2. Concentration and Market Domination in the Turkish Banking Sector

Due to the financial crises of November 2000 and February 2001, the ensuing restructuring of the banking sector and the unfavorable market conditions, many banks had to leave the sector, which created a hard-to-bear burden for the state because of the unlimited guarantees provided for deposits. As a result, the banking sector saw many changes, particularly stemming from consolidation efforts through mergers, and the share of the banks which are considered as large scale because of the deposits they command increased. As an explanation for this change, customer tendency toward opting for depositing money to big sized banks during a financial crisis as well as changes in the market shares of banks are suggested. In short, market dominance by big players increased. Consequently, there has been a rapid increase in concentration with respect to assets, credits and deposits since 2000 (Yayla 2007).

When concentration and market dominance in the Turkish banking sector where the seven largest banks are the leaders and which has an oligopolistic structure are examined, one can see that the share in sector assets of the seven banks which are largest according to total assets was 62 percent in 2008 while the sector share of the ten largest banks was 85 percent. The share of the five banks which are largest according to deposits was 64 percent while the share of the ten largest banks was 83 percent. There was a drop in concentration for the ten largest banks. There was no change in concentration for the five largest banks in terms of credits while the concentration for the ten largest banks rose to 89 percent (TBB Sep 2008 & TBB May 2008).

Table 7. Concentration in the Turkish Banking Sector (%)

	2001	2002	2003	2004	2005	2006	2007	2008
Five Largest Banks								
Total Assets	56	58	60	60	63	63	62	62
Total Deposits	55	61	62	64	66	64	64	64
Total Credits	49	55	54	48	56	58	57	57
Ten Largest Banks								
Total Assets	80	81	82	84	85	86	85	85
Total Deposits	81	86	86	88	89	90	89	83
Total Credits	80	74	75	77	80	93	83	89

Source: Derived from TBB, (May 2008), *Bankalarımız 2007-2006-2005-2004-2003-2002-2001*, and the TBB, (September 2008), *3 Aylık Banka Bilgileri Raporu*.

The following Herfindahl-Hirschman Index (HHI) was used to study the market structure of the Turkish banking sector on performance and explain the concentration in the sector.

Herfindahl-Hirschman Index

Herfindahl-Hirschman Index (HHI) is used to measure the market concentration as part of a market structure analysis. It is defined as the sum of the squares of the market shares of all firms (banks) (Bikker 2004).

If the total of market shares is expressed as 100, the HHI ranges between 0 and 10,000. Thus,

- 0 - 199 (full competition market, 51 or more banks having equal market shares)
- 200 - 999 (weak oligopolistic, 11 - 50 banks having equal market shares)
- 1,000 - 1,799 (strong oligopolistic, 6 - 10 banks having equal market shares)
- 1,800 - 10,000 (monopolistic, 1 - 5 banks having equal market shares) (Yetim & Gülhan 2005).

Table 8. HHI Values (All Sector)

	2001	2002	2003	2004	2005	2006	2007	Sep.2008
Total Assets	809.1	865.4	928.6	937.4	966.6	959.5	938.5	937.26
Total Credits	762.2	740.8	737.2	744.5	798.4	858.5	849.3	854.64
Total Deposits	817.7	960.2	1041	1117.5	1093.2	1072.2	1063.9	1052.22

Source: Derived from TBB, (May 2008), *Bankalarımız 2007-2006-2005-2004-2003-2002-2001*, and the TBB, (September 2008), *3 Aylık Banka Bilgileri Raporu*.

According to the calculations, the asset and credit concentration in the Turkish banking sector were considerably close to each other while there was a greater concentration in deposits. The highest HHI value was 1,117.5 observed in the deposits market in 2004. With respect to assets and credits, the sector's HHI value was found to be below 1,000 in the period 2001-2008 examined, which implies concentration toward a strong oligopolistic structure. It was unconcentrated in terms of deposits until 2002, after which moderate concentration was observed. In this regard, the Turkish banking sector shifted toward a strong oligopolistic structure in terms of assets and credits through mergers and acquisitions.

Table 9. HHI Values for Asset Sizes (Five Largest and Ten Largest Banks)

		2001	2002	2003	2004	2005	2006	2007	Sep.2008
Total Assets	**Five Largest Banks**	668.5	733.7	793.7	771.7	820.7	809.3	785.4	781.4
	Ten Largest Banks	790.1	846.6	911.7	920.2	952.7	941.7	920.5	920
Total Credits	**Five Largest Banks**	583.1	627.1	593.7	579.3	646,4	683.2	659.7	662.5
	Ten Largest Banks	646	685.8	677.8	701.4	768,3	828.2	821.8	828.5
Total Deposits	**Five Largest Banks**	683.4	827.9	882.1	914.2	919	894.9	883.7	857.9
	Ten Largest Banks	805.6	948.7	1028.9	1106	1082.4	1039.9	1048.2	1038.7

Source: Derived from TBB, (May 2008), *Bankalarımız 2007-2006-2005-2004-2003-2002-2001*, and the TBB, (September 2008), *3 Aylık Banka Bilgileri Raporu*.

When the sector was examined with respect to five and ten largest banks, the situation was similar to the overall situation. Customers tend to opt for bigger banks in which they have confidence while smaller banks act more aggressive in the credit market to boost their market share. It can be said that smaller banks offer higher interest rates and take higher credit risks in order to secure higher amounts of deposits. This can be regarded as a behavior with some ethical risks. On the other hand, the reason why bigger banks have lower shares in the credit market is that the big banks operating in Turkey tend to keep domestic government bonds with zero risk in their portfolios.

2.1.3. Proposals for Increasing Effectiveness and Competitiveness in the Turkish Banking Sector

The following table contains a SWOT analysis that may serve for better understanding the Turkish banking sector and its competitiveness, and the strengths, weaknesses, opportunities, and threats involved in the sector were depicted.

Table 10. SWOT Analysis for the Turkish Banking Sector

Threats - Restricted guarantee for deposits - Increased transparency toward clients - Lower interest rates and margins - Non-banking competition - New technical standards - Problems in adapting to changes in legislation - Economic and financial uncertainty - Crisis periods and decreased effectiveness in the sector - Increased interest from foreign banks - Concentration	**Weaknesses** - Lack of qualified personnel - Technological inadequacy - Lack of funds for R&D - High costs - Low effectiveness and efficiency - Inadequacy of competitiveness - Insufficient product and service diversification - Lack of independent audit - Insufficient transparency
Opportunities - Less restrictive controls on prices and products - Developing alternative resource creation - Easer access to market - Larger local market - Easier cross-border entry - Young and dynamic population	**Strengths** - Multiple technology products - Increased risk, credit and liquidity management - Increased client base knowledge - Confidence and prestige increase - Improved capability for attracting deposits

- More non-price competition - Products and services with high value added - Cooperation and partnerships - Multiple technology products - High quality - Improvement of the sector - Restructuring of the public, private and Savings Deposit Insurance Fund (TMSF) controlled banks - Decreased restrictions to market entry and transition from oligopolistic competition to competitive environment thanks to legal arrangements, technological and information technology developments - Inflow of foreign capital	- Rising rates of conversion of deposits to credits - Increased quality in product and service provision - Banks' finding new sources of income and adopting cost minimizing strategies and introducing organizational changes for expanding their customers' base and credit portfolios - Improved credit volume and more efficient use of resources

Source: The SWOT analysis was made based on the assessments done within the context of the study.

2.2. Overall Structure of the EU Banking Sector, and its Competitiveness and Market Domination

Globalization and financial liberalization in the world have triggered a fundamental change in the financial system in the EU. The integration of the financial system within the EU started, making markets homogeneous, fostering mergers among financial intermediaries, and resulting in new products and techniques. The Economic and Monetary Union (EMU) (January 1, 1999) accelerated the integration process in the financial system. Boundaries between national financial markets have largely lost importance (Yücememiş 2005). Due to the structural harmonization with the EMU interest rates, the profit margins and net interest margins of the banks in the EU have gradually decreased as was the case in Turkey. Thus, income structures of banks shifted away from interest incomes toward non-interest incomes.

Today, big finance groups in Europe essential fail to secure a very rapid growth and high rates of profitability housing finance, consumer credits, credit cards and other areas in their respective countries because of the competitive pressures, market saturation, difficulties in increasing assets and decreasing incomes in domestic markets. This urges them to seek alternative markets and the countries whose finance groups that enter international markets become strong with respect to capital and earn experience at the international level. The next step for the European countries is to attain economies of scale with their operations, diversify their products, disperse risk, minimize costs and improve quality of their services.

Increased competition in the EU finance sector has made it compulsory for firms to boost their effectiveness and efficiency. To maintain financial stability, effective supervision has emerged as an essential requirement. In addition, the sector should be able to satisfy customer demands, provide information and consultation services to customers, adapt to technological changes, and develop marketing strategies in order to attain stability (Yücememiş 2005).

2.2.1. EU Member Countries with Developed Economies

Germany, Austria, Belgium, the Netherlands, Italy, France and the UK were picked for analysis from the EU member countries with developed countries. When the following tables are examined, one can see that concentration rates increased in these countries with developed economies through mergers and acquisitions, which led to serious structural changes with respect to new strategic moves. When the banks from the EU member countries acquire or merge with the banks in other countries, this leads to an increase in the overall assets within the union. Although there is not a big difference between the number of banks and branches in Italy and those in France, its asset size was almost half of France's.

Table 11. Total Assets of the Banking System of Selected Developed EU Member Countries (€ million)

	2001	2002	2003	2004	2005	2006	2007
Germany	6,268,700	6,370,194	6,393,503	6,584,388	6,826,534	7,120,805	7,562,431
Austria	573,384	554,528	586,459	635,348	721,159	789,770	890,747
Belgium	776,173	774,330	828,557	914,391	1,055,270	1,121,905	1,297,788
Netherlands	1,265,906	1,356,397	1,473,939	1,677,583	1,695,325	1,873,129	2,195,020
Italy	1,851,990	2,024,156	2,125,366	2,275,628	2,509,436	2,793,436	3,331,830
France	3,768,943	3,831,610	3,998,554	4,419,045	5,073,388	5,728,127	6,682,335
UK	5,829,766	5,853,959	6,288,193	7,085,205	8,526,509	9,868,683	10,093,134
TURKEY (million TL)	**216,507**	**212,675**	**249,749**	**306,451**	**381,639**	**484,857**	**561,171**

Source: Compiled from European Central Bank, October 2006, *EU Banking Structures* and European Central Bank, October 2008, *EU Banking Structures*.

Table 12. Concentration Index (HHI) of the Banking System of Selected Developed EU Member Countries (By Asset Size)

	2001	2002	2003	2004	2005	2006	2007
Germany	158	163	173	178	174	178	183
Austria	561	618	557	552	560	534	527
Belgium	1,587	1,905	2,063	2,102	2,112	2,041	2,079
Netherlands	1,762	1,788	1,744	1,726	1,796	1,822	1,928
Italy	260	270	240	230	230	220	330
France	606	551	597	623	758	726	679
UK	282	307	347	376	399	394	449
TURKEY	**809.1**	**865.4**	**928.6**	**937.4**	**966.6**	**959.5**	**938.5**

Source: Compiled from European Central Bank, October 2006, *EU Banking Structures* and European Central Bank, October 2008, *EU Banking Structures*.

A comparison between developed countries and Turkey reveals that Turkey lags considerably behind these countries in terms of bank and branch numbers as well as total asset size. Moreover, it can be asserted that according to the concentration index, Turkish banking sector has moved toward the strong oligopolistic position and that it has lower rates of conversion of total deposits to credits compared to these countries.

2.2.2. Developing EU Member Countries

Spain, Greece, Portugal and Finland were picked from among the developing EU member countries. It was found that in these countries, the number of banks decreased while the number of branches increased. This can be explained by the fact that with membership to the EU, mergers and acquisitions with the banks from other countries increased, thereby boosting concentration. This is also obvious from the increase in the total asset size.

Table 13. Total Assets of the Banking System of Selected Developing EU Member Countries (€ million)

	2001	2002	2003	2004	2005	2006	2007
Spain	1,247,998	1,342,492	1,502,861	1,717,364	2,149,456	2,515,527	2,945,262
Greece	202,736	201,608	213,171	230,454	281,066	315,081	383,293
Portugal	298,428	310,370	348,691	345,378	360,190	397,123	440,144
Finland	163,416	165,661	185,846	212,427	234,520	255,055	287,716
TURKEY (million TL)	**216,507**	**212,675**	**249,749**	**306,451**	**381,639**	**484,857**	**561,171**

Source: Compiled from European Central Bank, October 2006, *EU Banking Structures* and European Central Bank, October 2008, *EU Banking Structures*.

Table 14. Concentration Index (HHI) of the Banking System of Selected Developing EU Member Countries (By Asset Size)

	2001	2002	2003	2004	2005	2006	2007
Spain	532	513	506	482	487	442	459
Greece	1,113	1,164	1,130	1,070	1,096	1,101	1,096
Portugal	991	963	1,043	1,093	1,154	1,134	1,097
Finland	2,240	2,050	2,420	2,680	2,730	2,560	2,540
TURKEY	**809.1**	**865.4**	**928.6**	**937.4**	**966.6**	**959.5**	**938.5**

Source: Compiled from European Central Bank, October 2006, *EU Banking Structures* and European Central Bank, October 2008, *EU Banking Structures*.

When these figures are compared with the figures related to the Turkish banking sector, it can be seen that the number of banks is lower than those in these countries while the number of branches is higher thanks to mergers with foreign banks. With respect to total assets, total deposits and total credits in the banking sector, there is no significant difference between these countries and Turkey. For this reason, it can be suggested that Turkey, being a candidate country, has economic structure similar to this group of countries and the harmonization of its banking sector can be considered as sufficient.

2.2.3. EU Member Countries with Transition Economy

The Czech Republic, Hungary, Romania, Bulgaria, Poland and Estonia were selected from the EU member countries with transition economy. While these countries have different development levels and economic volumes, their banking sectors showed growth after they joined the union, as seen in the tables. Particularly in the Czech Republic and Hungary, economic development level was higher and banking sector had investments in international markets before the 2008 crisis, and this boosted mergers and acquisitions with the banks in other countries and the number of banks decreased while the number of branches increased. In other countries, particularly in Estonia, the number of banks and branches quickly increased, which can be regarded as an economic advantage of being a member of the union.

Table 15. Total Assets of the Banking System of Selected EU Member Countries with Transition Economy (€ million)

	2001	2002	2003	2004	2005	2006	2007
Czech Republic	78,188	79,232	78,004	87,104	100,902	114,878	140,004
Hungary	38,433	43,564	54,769	64,970	78,289	93,679	108,504
Romania	na	na	15,000	23,200	35,400	51,911	72,095
Bulgaria	na	na	9,254	13,224	17,447	22,302	31,238
Poland	133,476	116,044	112,174	141,571	163,421	189,739	236,008
Estonia	4,372	5,221	6,314	8,586	11,876	15,326	20,603
TURKEY (million TL)	**216,507**	**212,675**	**249,749**	**306,451**	**381,639**	**484,857**	**561,171**

Source: Compiled from European Central Bank, October 2006, *EU Banking Structures* and European Central Bank, October 2008, *EU Banking Structures*.

Table 16. Concentration Index (HHI) of the Banking System of Selected EU Member Countries with Transition Economy (By Asset Size)

	2001	2002	2003	2004	2005	2006	2007
Czech Republic	1,263	1,199	1,187	1,103	1,155	1,104	1,100
Hungary	892	856	783	798	795	823	839
Romania	na	na	1,251	1,111	1,115	1,165	1,041
Bulgaria	na	na	na	721	698	707	833
Poland	821	792	754	692	650	599	640
Estonia	4,067	4,028	3,943	3,887	4,039	3,593	3,410
TURKEY	**809.1**	**865.4**	**928.6**	**937.4**	**966.6**	**959.5**	**938.5**

Source: Compiled from European Central Bank, October 2006, *EU Banking Structures* and European Central Bank, October 2008, *EU Banking Structures*.

Comparison of these figures with the figures related to the Turkish banking sector indicates that there is no significant difference with respect the number of banks, but the number of branches is higher in Turkey thanks to mergers with foreign banks. In terms of total asset size, total deposits and total credits, Turkey is out in the lead ahead of the EU member countries with transition economies, and in this respect, it can regarded as ready for membership to the EU. As for the HHI, it can be seen that the Turkish banking sector is shifting toward the strong oligopolistic structure as regards the economic and sector size in Turkey.

Conclusion

Today, non-price competition has increased. Competitiveness can only be ensured via rise in efficiency, and income obtained from this increase may boost welfare in the country. Securing a competitive edge and/or increasing competitiveness will depend on effective and rational competition strategies developed. Increased market dominance results in increased concentration, which in turn decreases level of competition in the markets. Competition among banks undermines market power of banks, causing a decline in their profit margins. Under the increased competitive pressures from the non-sector financial organizations and markets, banks are urged to engage in insurance, private banking and asset management and other non-interest bearing operations. They try to adapt to the rapidly changing competitive environment through internal growth or merger and acquisition strategies.

Despite the fluctuations and increased risk in international markets, the Turkish banking sector has managed to boost corporate and consumer loans. The public sector borrowing requirement has decreased, creating proper maturity and interest conditions and causing the rate of conversion of deposits to credits to increase, thereby boosting the contribution of the banking sector to the non-financial sector. Moreover, the Turkish banking sector has acted cautiously, preserving its profitability and increasing its non-interest income. Competition in the sector has led to a drop in cost and made resource distribution more effective and boosted efficiency and effectiveness. According to the Herfindahl-Hirschman (HHI), the concentration in the Turkish banking sector implies a strong oligopolistic structure where big banks are dominant in the market. However, in parallel to efforts for restructuring and integration with international markets, large scale institutional changes as well as changes to the products and services provided have been introduced. In this regard, the Turkish banking sector can be regarded as one of the most well-prepared sectors for harmonization with the EU, particularly with respect to openness to competition and legal arrangement. Nevertheless, on a global scale, the

Turkish banking sector is still small in terms of volume of assets, deposits and credits. The competitive environment in the sector fosters innovation and quality. Due to change in its assets and liabilities structure, the sector will continue to be vulnerable to liquidity, exchange and interest rate related risk. However, the Banking Regulation and Supervision Agency (BDDK) regularly issued guiding notices and explanations for the sector in 2008, and the sector seems to be capable of cautiously acting by the lesson it learned in the 2001 crisis. Yet, the Turkish banking sector may feel the heat from the high level of debts by non-financial economy and limited borrowing opportunities. If public authorities may implement policies for increasing production by bringing relief to non-financial sector and for warding off the pressure on the financial sector, this may result in a slight increase in economic performance and growth rate in 2009.

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