Cengiz Erol[1], Hasan F. Baklaci[2], Gülin Vardar[3]

THE IMPACT OF CHANGES IN OWNERSHIP STRUCTURE AFTER 2001 CRISIS ON BANK PERFORMANCE IN TURKEY

Turkish banking sector has gone through a major restructuring following the 2001 crisis and due to the intensive entries of foreign banks into the sector, changes in the ownership of banks in the sector has been observed. The performance impact of structural changes in Turkish banking sector in post 2001 crisis period has been analyzed by bilateral comparison of sector banks based on their ownership forms. The analyses indicate that public banks are found to improve their performance and gain a relative competitive position. On the other hand, wholly owned foreign banks operating in the sector could not differentiate their performance relative to domestic banks and even lagged beyond these banks in the majority of the performance criteria. One of the most remarkable and unique results gathered from the study is that domestic banks with a foreign bank partnership had better performance effectiveness compared to wholly owned foreign banks.

Keywords: *2001 crisis; bank performance effectiveness; bank ownership structure; CAMELS; logistic regression.*

JEL classification: *G21, G01.*

Ченгіз Ерол, Хасан Ф. Бакладжі, Гюлін Вардар

ВПЛИВ ЗМІН У СТРУКТУРІ ВЛАСНОСТІ ПІСЛЯ КРИЗИ 2001 РОКУ НА ЕФЕКТИВНІСТЬ ДІЯЛЬНОСТІ БАНКІВ ТУРЕЧЧИНИ

У статті наведено, що турецький банківський сектор пережив серйозну реструктуризацію після кризи 2001 року і у зв'язку з інтенсивною появою іноземних банків в секторі спостерігаються зміни в структурі власності банків у ньому. Вплив структурних змін на ефективність діяльності в турецькому банківському секторі в період після кризи 2001 року було проаналізовано за допомогою двостороннього порівняння банків залежно від їх форм власності. Аналіз показав, що державні банки підвищили ефективність діяльності і вийшли на відносно конкурентоспроможні позиції. З іншого боку, повністю іноземні банки, що працюють у цьому секторі, не змогли диференціювати свої показники в порівнянні з вітчизняними банками і навіть відстали від цих банків за більшістю критеріїв ефективності. Один з унікальних результатів дослідження - те, що вітчизняні банки з іноземним партнерством мали вищу продуктивність в порівнянні з ефективністю діяльності стовідсотково іноземних банків.

Ключові слова: *криза 2001 р.; ефективність діяльності банку; структура власності банку; CAMELS; логістична регресія.*

Ченгиз Эрол, Хасан Ф. Бакладжи, Гюлин Вардар

ВЛИЯНИЕ ИЗМЕНЕНИЙ В СТРУКТУРЕ СОБСТВЕННОСТИ ПОСЛЕ КРИЗИСА 2001 ГОДА НА ЭФФЕКТИВНОСТЬ ДЕЯТЕЛЬНОСТИ БАНКОВ ТУРЦИИ

В статье показано, что турецкий банковский сектор пережил серьезную реструктуризацию после кризиса 2001 года, и в связи с интенсивным появлением иностранных банков в секторе наблюдаются изменения в структуре собственности

[1] Professor, Department of International Trade and Finance, Izmir University of Economics, Turkey.
[2] Associate Professor, Department of International Trade and Finance, Izmir University of Economics, Turkey.
[3] Instructor, Department of International Trade and Finance, Izmir University of Economics, Turkey.

банков в нем. Влияние структурных изменений на эффективность деятельности в турецком банковском секторе в период после кризиса 2001 года было проанализировано посредством двустороннего сравнения банков в зависимости от их форм собственности. Анализ показал, что государственные банки повысили эффективность деятельности и вышли на относительно конкурентоспособные позиции. С другой стороны, полностью иностранные банки, работающие в этом секторе, не смогли дифференцировать свои показатели по сравнению с отечественными банками и даже отстали от этих банков по большинству критериев эффективности. Один из уникальных результатов исследования - то, что отечественные банки с иностранным партнерством имели более высокую производительность по сравнению с эффективностью деятельности стопроцентно иностранных банков.

Ключевые слова: *кризис 2001 г.; эффективность деятельности банка; структура собственности банка; CAMELS; логистическая регрессия.*

1. Introduction. There have been numerous efforts to transform the banking sector in Turkey into a more competitive structure, particularly through some regulations and implementation carried out after the 2001 crisis. In this period, it may be argued that the changes observed particularly in the ownership structures of banks might consequently have effect on the performance effectiveness of those banks.

The competition was quite low within banking sector before the 2001 crisis. The reasons of low competition are the oligopolistic structure of Turkish banking system and suboligopolistic structure of public banks within the system.

The fact that the public banks were not operating efficiently and productively before the 2001 crisis was the main reason why those banks could not cope with the competitive environment in the sector. Low return-on-assets for public banks was another indicator of their inefficiencies in spite of their high market shares in the sector (Canbas and Erol, 1984). Consequently, as the result of the oligopolistic structure characterized by high market shares within banking sector before the 2001 crisis, public banks could not keep pace with international competition, and, overall, they hindered banking sector from gaining efficient and productive structure in domestic and international markets.

There are two groups that make banking system more competitive; the foreign banks, the number of which have increased after 1980s, and small scale private banks. Despite the fact that multi-branch large private banks went into competition with foreign banks by decreasing the variable costs through closing down inefficient branches, diminishing the number of staff or bringing new technological advances in order to adjust to changing conditions, such subsidiary changes could not create the desired competition in the system. In other words, a satisfactory competitive environment was not constituted with the presence of foreign banks in Turkish banking system. Some of the foreign banks left Turkish banking system before 2001 crisis.

Following the crisis of 2001, the ownership and competitive structure of Turkish banking sector had gone through a significant change. Following this period, foreign banks joined the sector through various modes of entry. Following the completion of restructuring process in Turkish banking sector through ownership changes, its current ownership structure can be analyzed under three main headings: "Privately Owned Banks", "Publicly Owned Banks", and "Foreign Banks".

The number of privately owned banks has declined by 50% between 2001 and 2011. While the number of foreign banks diminished to 13 by 2005, it started increasing again in 2006 and by the end of 2010, the number of foreign banks has reached 17. Publicly owned banks have largely retained their existence. 3 banks in total (Halk Bank, Ziraat Bank, and Vakiflar Bank) are still operating in the sector. A substantial process of ownership change has occurred in many privately owned banks after 2002, and the foreign capital share in those banks has increased[3].

The objective of this study is to analyze the impact of the changes in the ownership structures observed in the banking sector after 2001 crisis on the performance effectiveness of banks via classification of banks in different groups based on type of ownership structure. The contribution of this paper to the literature is that this is the first study that divides the banks into in groups much more details with respect to ownership structure.

The rest of the paper is organized as follows. Section 2 gives a brief literature review on the effect of ownership structures on the bank performance, followed by the data set and the methodology. The empirical results are presented in section 4. Section 5 contains concluding remarks.

2. Literature. In the relevant literature, while some studies analyze the effects of the differences in bank ownership structures upon performance of banks generally investigated the effect of foreign banks within domestic banking system, another set of the studies analyzed the effects via comparing the performances of foreign banks with that of domestic banks.

Claessens et al. (2001) found that foreign banks in developing countries had higher net interest margin and profit than domestic banks, and that the case is reverse in developed countries. The results of the study also revealed that the existence of foreign banks had adverse effects upon the profitability, non-interest income and total expenses of domestic banks.

Uiboupin (2004) found that the entrance of foreign banks into the banking system had adverse effects upon the profitability, interest and non-interest incomes of domestic banks in East European countries. In the study conducted by Hermes and Lensink (2004), by taking development of financial system into consideration, it was concluded that when the development of financial system was low, the existence of foreign banks in the system increased the costs and the profitability of domestic banks. The study conducted by Bayraktar and Wang (2004) showed that the competition within banking sector increased in accordance with the increase of foreign banks in number. Furthermore, it was found out that the financial liberalization process had a significant effect upon the performance of domestic banks.

Using logistic regression analysis, Kosmidou et al. (2006) demonstrated that the performance of domestic banks was higher than that of foreign banks within the framework of financial ratios used. In a similar study, Chantapong (2005) ascertained that after Asian crisis, domestic banks displayed a faster development, particularly in profitability rates in Thailand.

[3] In that period, Denizbank and Finansbank transferred themselves to the state of foreign bank by preserving their names. HSBC, Fortis Bank and ING took over domestic banks and continued their activities. In the same period, domestic private deposit banks including Akbank, Garanti Bankasi, Sekerbank and Turk Ekonomi Bankasi increased the share of foreign capital and they still continue to operate as domestic private deposit banks.

A large body of literature investigated the effect of the entrance of foreign bank into the sector upon the performance of domestic banks in developed and emerging countries, whereas Turkish banking sector was examined to a smaller extent. The study carried out by Denizer (1999) concluded that the operating expenses of domestic banks reduced simultaneously with the entrance of foreign banks into the sector.

In the study conducted by Cakar (2003), it was discovered that the existence of foreign banks in Turkish banking sector raised the competition within national market. Furthermore, foreign banks did not impact the oligopolistic structure and market concentration as they had low market shares in the sector. Aktas and Kargin (2007) found that foreign banks had higher capital adequacy and liquidity ratios in Turkey. Furthermore, there were statistically significant differences in terms of income and expense structure.

Employing a multivariable logistic regression analysis, Ata (2009) observed that domestic banks were more effective than foreign banks in some performance indicators whereas in terms of return on asset, operating profit/total assets and non-interest expense/total asset ratios, foreign banks were found to be much more effective.

3. Data and Methodology. The banks will be analyzed in terms of ownership structure under three main headings, namely, "Private Domestic Banks", "Public Banks" and "Foreign Banks", in accordance with the classification of Banking Regulation and Supervision Agency (BRSA hereafter). Development and investment banks are not included in the analysis to achieve consistency and homogeneity between the bank groups classified on the basis of ownership structures. Additionally, domestic deposit banks with private capital have been divided into two groups as private banks with 100% domestic capital and domestic banks with foreign partnership which has not been considered in earlier studies.

In the analysis, CAMELS performance assessment criteria, which are widely used in banking sector, will be used as performance indicators. CAMELS, as a term, is formed from the 6 performance criteria components (Kaya, 2001; Sakarya, 2010). C stands for capital adequacy; A for asset quality; M for management quality; E for earnings power; L for Liquidity; and S for sensitivity to market risk. Under these 6 main criteria, there exist 21 ratios used in performance analysis. The average values of the financial ratios used under CAMELS analysis between 2005 and 2009 are displayed in Table 1 in accordance with the classification of bank groups.

2002-2009 has been used as the sample period since the purpose of the analysis is to examine whether changes in ownership structure of banking sector after 2001 crisis have created differences in the performance effectiveness between bank groups. The data set, obtained from the statistical reports of the Banks Association of Turkey (BAT), includes the annual data of 22 banks operating in Turkey over the years 2002 and 2009.

The logistic regression analysis, a frequently-used method in differential analyses, is employed to analyze the performance differences between the bank groups. It is a more preferable method for such analyses due to its advantages over the linear regression method.

Table 1. **The Average Values of CAMELS Ratios by Bank Groups (2005-2009)**

	Public Banks					Domestic Private Banks					Foreign Banks				
Ratio	**2009**	**2008**	**2007**	**2006**	**2005**	**2009**	**2008**	**2007**	**2006**	**2005**	**2009**	**2008**	**2007**	**2006**	**2005**
Capital Adequacy	18,4	16,4	20,1	29,1	37,7	19,7	16,4	17,2	17,5	17,2	18,8	16,7	14,5	16,0	17,4
Foreign Exchange Position/Total Shareholders' equity	9,5	11,9	15,8	20,0	17,7	25,7	10,8	24,9	33,7	34,0	119,2	147,6	111,9	80,7	30,8
Total Shareholders' equity/Total Assets	9,4	8,3	10,3	10,4	10,6	13,0	11,1	12,2	10,4	12,4	14,7	12,6	13,2	12,0	15,9
Non Performing Loans/Tot. Loans	4,5	3,8	4,1	5,1	8,0	5,4	3,5	3,6	3,6	4,2	7,8	4,1	2,9	2,7	3,9
Total Assets	44,3	42,5	44,9	50,6	52,0	34,6	26,3	28,5	31,7	30,0	21,6	18,7	18,9	15,9	21,2
Fixed Assets/Total Assets	2,2	2,3	2,2	2,3	2,8	4,2	4,2	5,3	5,5	6,9	3,8	3,4	3,5	3,0	3,8
Net Profit per branch	3	2	2	2	1	2	2	2	1	0	1	1	1	1	1
Operating Expense/Total Assets	1,8	1,9	2,0	2,1	2,2	2,7	3,1	3,2	3,1	4,3	4,6	4,5	4,7	4,8	6,4
Net Profit (Losses)/Total Assets	2,6	1,9	2,8	2,6	2,3	2,4	1,8	2,4	1,8	0,6	1,9	1,3	2,0	2,5	2,5
Net Profit (Losses)/ Total Shareholders' equity	27,2	22,5	26,8	25,1	21,6	18,5	15,8	19,9	16,9	4,7	13,1	10,5	15,2	20,5	15,5
Income before tax/Total Assets	3,2	2,4	3,4	3,4	3,3	3,0	2,1	3,0	2,3	1,3	2,2	1,7	2,5	3,0	3,4
Total Income / Total Expense	151,7	129,1	135,0	137,3	138,2	161,9	132,1	138,8	132,4	130,9	145,2	126,3	127,5	136,7	133,5
Liquid Assets / Total Assets	29,7	22,3	44,6	44,3	39,2	34,9	28,3	35,2	37,7	40,8	33,4	28,5	29,8	38,4	39,9
FC Liquid Assets / FC Liabilities	39,3	39,7	59,7	63,3	58,5	32,5	34,5	42,7	46,7	47,1	24,9	24,4	26,4	43,7	44,7
FC Assets/FC Liabilities	96,0	95,9	92,4	91,4	91,1	90,6	96,9	92,1	92,0	90,2	53,9	56,3	62,5	78,4	88,2
Interest Income / Total Assets	11,0	12,8	13,6	12,8	12,2	9,8	11,2	11,7	10,5	9,9	12,6	13,5	12,8	11,1	11,9

Source: The Banks Association of Turkey.

The basic approach in the study is to examine and contrast the performance effectiveness between bank groups according to ownership structure using peer group analysis. Bank groups have been divided into 4 categories:

1) Public banks;
2) Privately owned banks with 100% domestic capital;
3) Banks with 100% foreign capital;
4) Privately owned domestic banks with foreign shares in their capital.

In total, 6 analyses will be carried out through dual comparison of bank groups by use of logistic regression. The bank groups mentioned above will be taken as dependent variables in the analyses. Thus, the banks will be valued as 0 or 1 in the dual comparison analyses.

4. Empirical Results. Financial ratios in CAMELS analysis have been used as independent variables in logistic regression analysis. As a result of the multicollinearity test applied to ratios, a strong multicollinearity[4] has been detected between some of the ratios. 12 ratios in total are used after excluding the ratios with strong multicollinearity. In logistic regression analysis, it is significant which bank group has the values 0 and 1 in the classification of bank ownership structures used as dependent variables. To deal with this matter, the following hypotheses tested in the study have been taken into account and will be assigned:

H1: In Turkey, the efficiency of foreign banks, whose numbers are increasing recently, is increasing too and when compared with domestic banks, they display better performance in terms of many criteria and ratio.

H2: Public banks have a competitive disadvantage in performance criteria when compared with domestic private banks and foreign banks.

H3: When compared with domestic private banks with a share of foreign capital, fully foreign banks display better performance.

H4: The strategic partnerships of domestic private banks with foreign banks create synergy and lead to a better performance against domestic banks.

In the light of these hypotheses, the following assumption is tested: As a strategy for entering Turkish banking sector, foreign banks take over domestic banks and control the ownership which create a difference in terms of competitive advantage. They also use their experiences and know-how in international markets to create competitive advantage. It is tested whether these are reflected on their performances. Therefore, one of the null hypotheses used in the analysis is that the full control of foreign banks in management creates better performance compared with the strategic partnership with domestic banks.

Consequently, in the light of these assumptions, in all peer group analyses, 1 is assigned to represent foreign banks owned by completely foreigners, whereas 0 indicates public banks. In the comparison of fully domestic private banks against domestic banks with foreign partners, based on the above-mentioned hypotheses, 1 is assigned to domestic banks with foreign partners and 0 is assigned to fully domestic private banks. The results of the logistic regression analysis are presented in Table 2.

The results of the comparison between public banks and domestic private banks indicate that while return on equity, foreign currency liquidity position, and interest

[4] The ratios which have a correlation coefficient of 0.6 or above were eliminated but it can be presented upon request.

income to total assets are more determinant ratios for public banks, asset and management quality, and sensitivity to foreign exchange risk are more determinant for domestic private banks. The results show that while private banks prefer to maintain a higher liquid position in Turkish lira, public banks prefer liquidity in foreign currency. One of the explanations for these results could be the fact that after the 2001 crisis the share of financial assets in total assets are higher for public banks than for domestic private banks. More specifically, in total assets composition, public banks hold higher proportion of medium- and long-term government bonds in high rates. This, in turn, results in more interest income for public banks.

The results also denote that even though domestic private banks were more effective than foreign banks in terms of capital adequacy, income-expense, and sensitivity to market risk ratios, foreign banks were found to be more profitable and successful in asset management. Furthermore, other result of the analysis indicates that domestic private banks generate more interest income on their assets than foreign banks. The fact that domestic private banks were more effective in the asset-liability management in foreign currency and in capital adequacy can be construed that those banks could hedge themselves more efficiently against market and foreign exchange risks.

Table 2. **Performance Comparison of Banking Groups**

Performance Criterion	Public Banks (0) – Domestic Private Banks (1)	Domestic Private Banks (0) – Foreign Banks (1)	Public Banks (0) – Foreign Banks (1)
Capital Adequacy	-0.0102 (0.2744)	-0.009 (0.082) ***	-0.062 (0.002) *
Non-Performing Loans / Total Loans and Receivables		-0.071 (0.492)	
Fixed Assets / Total Assets	0.1879 (0.077) ***		0.099 (0.439)
Operating Expenses / Total Assets	0.3028 (0.098) ***	0.439 (0.000) *	0.709 (0.055) ***
Net Profit (Losses) / Total Assets	0.178 (0.165)	0.186 (0.011) **	
Net Profit (Losses) / Total Shareholders' equity	-0.148 (0.076) ***		-0.230 (0.000) *
Total Income / Total Expenses		-0.046 (0.000) *	-0.009 (0.786)
Liquid Assets / Total Assets	0.062 (0.062) ***	-0.008 (0.479)	0.139 (0.017) **
FC Liquid Assets / FC Liquid Liabilities	-0.051 (0.083) ***		-0.082 (0.176)
FC Assets / FC Liabilities	0.085 (0.019) **	-0.015 (0.056) ***	0.052 (0.431)
Interest Income / Total Assets	-0.152 (0.007) *	-0.157 (0.011) **	
Off-Balance Sheet Foreign Exchange Position / Total Shareholders' equity	0.042 (0.043) **		0.027 (0.063) ***
LR statistics Prob (LR statistics)	-28.55 (0.000)	-98.027 (0.000)	-58.193 (0.000)

Performance Criterion	Public Banks (0) – Domestic Private Banks with Foreign Partner (1)	%100 Domestic Private Banks (0) – Domestic Private Banks with Foreign Partner (1)	Domestic Private Banks with Foreign Partner (0) –100% Foreign Banks (1)
Capital Adequacy	-0.115 (0.053) ***	-0.179 (0.011) **	-0.002 (0.968)
Non-Performing Loans / Total Loans and Receivables		0.478 (0.027) **	0.173 (0.519)
Fixed Assets / Total Assets	-0.270 (0.206)	-0.346 (0.031) **	
Operating Expenses / Total Assets	-0.075 (0.880)	-0.191 (0.555)	0.992 (0.000) *
Net Profit (Losses) / Total Assets		0.822 (0.086) ***	
Net Profit (Losses) / Total Shareholders' equity	-0.242 (0.075) ***		-0.081 (0.112)
Total Income / Total Expenses	0.037 (0.599)	-0.048 (0.307)	-0.056 (0.038) **
Liquid Assets / Total Assets	0.230 (0.084) ***	0.485 (0.001) *	-0.091 (0.045) **
FC Liquid Assets / FC Liquid Liabilities	-0.125 (0.222)	-0.270 (0.008) *	0.043 (0.185)
FC Assets / FC Liabilities		0.027 (0.599)	-0.111 (0.008) *
Interest Income / Total Assets	-0.164 (0.496)	-0.244 (0.329)	-0.109 (0.156)
Off-Balance Sheet Foreign Exchange Position / Total Shareholders' equity	0.066 (0.190)	-0.040 (0.042) **	-0.011 (0.018) **
LR statistics Prob(LR statistics)	-10.498 (0.000)	-16.784 (0.000)	-35.2 (0.000)

*, **, *** denote statistical significance at the 1%, 5% and 10% levels respectively.

The results of the comparison between public and foreign banks, which are similar with the results of previous analysis, indicate that though public banks display more efficient performance in capital adequacy and return on equity ratios, foreign banks have dominated in asset management and liquidity position in domestic currency.

Just like the results of the comparison with domestic private banks, public banks displayed more efficient performance in terms of return on equity. However, they had lower liquidity ratios in domestic currency when compared with foreign banks. As stated in the comparison of public/domestic banks, a possible reason of this result is the fact that public banks have higher long-term public debt instrument in their asset composition.

It can also be suggested that foreign banks hold higher off-balance sheet foreign exchange position in proportion to their equities and, therefore, have higher non-operating expenditures leading to lower profitability compared to public banks. Similarly, as foreign banks hold higher liquid assets in their balance sheet than public banks, the liquidity risk of these banks is relatively lower.

As mentioned above, the primary motivation for dividing the banks with foreign capital into banks with 100% foreign capital and domestic banks with partial foreign ownership is to examine whether the control of foreign banks on management and their predominance on decision process creates a significant difference or synergy in the performance of these banks. The fact that foreign banks own a share in the capital of domestic banks creates a kind of strategic partnership between foreign and domestic banks[5].

In this analysis, the following hypothesis is tested:

H0: "If banks completely owned by foreigners transform their know-how into a competitive advantage, it should be positively reflected on the financial statements of these banks". Consistent with this hypothesis, at first, banks completely owned by foreigners and domestic private banks with a share of foreign capital (e.g., Akbank, Garanti Bankasi) were examined through a peer group analysis.

Liquid assets to total assets stand as the single ratio in which the domestic banks with foreign capital exert better performance than public banks. On the other hand, public banks display a better performance in terms of return on equity and capital adequacy ratios. These results show that the strategic partnership of domestic private banks with foreign ones did not create a synergetic effect in terms of performance differentiation against public banks.

The comparison of domestic private banks against domestic private banks with foreign partners indicate that private banks with foreign partners display higher performance effectiveness in terms of asset profitability, but private banks with completely domestic capital differentiate themselves in terms of capital adequacy and sensitivity to market risk. Similarly, in terms of liquidity ratios, the ratio of TL liquid assets to total assets is determinant for banks with foreign partners, but in terms of liquidity position in foreign currency, fully domestic banks have better performance.

At the end of the analysis, it can be suggested that the strategic partnerships between foreign and domestic banks do not create any competitive advantage against fully domestic banks in terms of performance effectiveness in the period analyzed.

In the final part of the analysis, fully foreign banks are compared against domestic private banks with foreign partnership. The analysis capitalizes on the idea whether strategic partnership with foreign banks creates a synergetic effect for the performance of domestic banks.

The results obtained do not seem to support the above-mentioned hypotheses and suggest that the control and predominance of foreign banks on management do not create any significant competitive advantage in terms of banks' performance effectiveness. The most important inference is that foreign banks that have investments in Turkish banking sector through partnerships with domestic banks may create an important competitive advantage. In the light of these results, it can be claimed that higher experience in domestic market can create advantage for domestic banks with foreign partners in terms of better performance when compared with foreign banks.

Subsequent to 2001 crisis, public banks restructured their activities and capital structures, which in turn positively affected their performance. After the crisis, public

[5] The Banking Regulation and Supervision Agency (BRSA) defines the concept of "strategic partnership" as being a partner with domestic banks through capital sharing.

banks changed their organizational structure and began to control their operating expenses to operate more efficiently and effectively. These changes resulted in increased profitability and particularly created significant improvements in return on equity when compared with foreign and domestic private banks. Public banks have also achieved important improvements in terms of capital adequacy criteria when compared with the banks with foreign capital. However, the liquidity of public banks is found to be lower owing mainly to the fact that they still hold a significant amount of long-term government bonds and public debt instruments in their security portfolio.

Another striking result of these analyses is that the number of foreign banks increased after the 2001 crisis and the expected know-how and other competitive advantage of these banks is not reflected on their financial statements and performances. Compared with other groups of bank, while banks with completely foreign capital can create performance dominance in terms of asset management, they do not create any superiority in profitability, capital adequacy and sensitivity to market risk criteria.

On the other hand, as an entry strategy into Turkish banking system, foreign banks should prefer to make strategic partnership with domestic banks to increase their performance effectiveness as opposed to taking over domestic banks. It can be suggested that these results have very important implications since there is no a similar comparative performance analysis in previous studies.

5. Conclusion. This study aims to analyze whether there is a difference among the groups of banks in terms of performance effectiveness subsequent to changes in ownership structures after the 2001 crisis in banking. The results of the analysis conducted through the CAMELS performance evaluation criteria can be summarized as follows:

The findings indicate that the public banks have increased their competitiveness in the sector through successful restructuring both financially and operationally. In the past, public banks were primarily considered as funders of government. However, currently, they have achieved considerable development in management and profitability criteria. Thus, public banks turned out to be successful without being privatized and decentralized after the 2001 crisis.

After the 2001 crisis, as a result of the structural change in Turkish banking system, many foreign banks took over domestic banks. The main objective of foreign banks was to be superior against domestic banks in terms of performance efficiency by using their comparative advantages. However, the results of this study showed that, despite great expectations, foreign banks could not build dominance against domestic banks in terms of performance effectiveness.

One of the most important contributions of this study is to reveal that domestic banks with foreign partnership can differentiate their performances significantly when compared to fully foreign banks. In terms of shaping their future strategies, this result should seriously be taken into consideration by foreign banks planning to enter Turkish banking sector. The findings of the study reveal that prior expectations of foreign banks are not generally materialized in Turkish banking sector.

After evaluating all the findings, it can be suggested that in Turkish banking sector, domestic banks can create a competitive advantage against foreign banks by reflecting their relative experiences and strengths at domestic market.

References:

Aktas, H. and Kargin, M. (2007). A Comparison of Financial Ratios of Foreign and Domestic Banks in Turkish Banking Sector, Journal of Management and Economics, 14 (2): 31-45.

Amemiya, T. (1981). Qualitative Response Models: A Survey, Journal of Economic Literature, 19 (4): 1483-1536.

Ata, H. A. (2009). Banka Yabancilasmasinin Turkiye'deki Yerli veYabanci Bankalar Acisindan Karsilastirilmasi, Ataturk University Journal of Economics and Administrative Sciences, 23(4): 109-124.

Bayraktar, N. and Wang, Y. (2004). Foreign Bank Entry, Performance of Domestic Banks and the Sequence of Financial Liberalization, (World Bank Policy Research Working Paper No: 3416).Retrieved 2010 from http://ideas.repec.org/p/wbk/wbrwps/3416.html.

Bierens, H. J. (2008). The Logit Model: Estimation, Testing and Interpretation. Retrieved 2010, September 20 from http://econ.la.psu.edu/~hbierens/ML_LOGIT.PDF.

Blommestein, H. J. (1993), Transformation of the Banking System: Portfolio Restructuring and the Payment System, OECD Publishing, Paris.

Broker, G. (1989). Competition in Banking, OECD Publishing, Paris.

Canbas, S. and Erol, C. (1984), Mevduat Sigortasi Dunya'da ve Turkiye'de Uygulama Yontemleri, The Banks Association of Turkey Publications, 42.

Chantapong, S. (2005). Comparative Study of Domestic and Foreign Bank Performance in Thailand: The Regression Analysis, Economic Change and Restructuring, 38: 63-83.

Claessens, S., Demirguc-Kunt, A., and Huinzinga, H. (2001). How Does Foreign Entry Affect Domestic Banking Markets, Journal of Banking and Finance, 25: 891-911.

Cakar, V. (2003) Yabanci Sermayeli Banka Girisleri ve Ulusal Bankacilik Sektorleri Uzerindeki Etkileri, Central Bank of the Republic of Turkey, Qualification Thesis, Ankara.

Colakoglu, S. (1995). Turk Mali Sisteminde Bankacilik Sektorunun Yeri ve Onemi, Capital Markets Board of Turkey Research Report, pp.14

Denizer, C. (1999). Foreign Entry in Turkey's Banking Sector, 1980-1997. World Bank Working Paper No: 2462

Hausman, J. A. and Wise, D. A. (1978). A Conditional Probit Model for Qualitative Choice: Discrete Decisions Recognizing Interdependence and Heterogeneous Preferences, Econometrica, 46 (2): 403-426.

Hermes, N. and Lensink, R. (2004). Foreign Bank Presence, Domestic Bank Performance and Financial Development, Journal of Emerging Market Finance, 3: 207-229.

Kaya, Y. T. (2001). Turk Bankacilik Sektorunde Camels Analizi, Banking Regulation and Supervision Agency, No:6.

Kilci, M. (1994). Baslangicindan Bugune Turkiye'de Ozellestirme Uygulamalari:1984-1994, State Planning Organization Reports, July.

Kosmidou, K., Pasiouras, F., Zopounidis, C., & Doumpos, M. (2006). A multivariate analysis of the financial characteristics of foreign and domestic banks in the UK, Omega, 34(2): 189-195.

Sakarya, S. (2010). Camels Derecelendirme Sistemine Gore IMKB' deki Yerli Ve Yabanci Sermayeli Bankalarin Karsilastirmali Analizi, Journal of Academic Researches and Studies, June: 7-21.

Schuijer, J. (1992). Banks Under Stress, OECD Publishing, Paris.

Uiboupin, J. (2004). Effects of Foreign Bank Entry on Bank Performance in the CEE Countries, Tartu Univesity Press, 569.

Yazicioglu, B. (1994). Competition in Turkish Banking System and Privatization of State Owned Banks, Master Thesis, Middle East Technical University, Graduate School of Social Sciences.

Zavgren, C. V. (1985). Assessing The Vulnerability to Failure of American Industrial Firms: A Logistic Analysis, Journal of Business Finance & Accounting, 12 (1): 19-45.

Стаття надійшла до редакції 13.03.2012.