BASEL II AND BANKING REGULATION AND SUPERVISION

Murat EMİR

Ondokuz Mayis University
Samsun / TURKEY

muratemir@omu.edu.tr

ABSTRACT

In this study, it has been tried to explain what Basel II stands for banking sector, which is the most important sector of finance, by emphasizing the importance of regulation and supervision practices of banking sector. The study consists of four main subjects: these are (i) Basel II and Banking, (ii) meaning of Basel II for banking sector in developing markets, (iii) Turkish Banking System and (iv) the status of Basel II in Turkish Banks and detailed and up to date information has been included.

Key Words: Banking Regulation and Supervision, Basel II, Emerging Market, Turkish Banking System, Ninth Development Plan.

BASEL II VE BANKACILIK DÜZENLEME VE DENETLEME

ÖZET

Bu çalışmada finans sektörünün en önemli sektörü olan bankacılığın düzenleme ve denetleme çalışmalarının ehemmiyetine vurgu yapılarak Basel II'nin sektör için ne anlama geldiği açıklanmaya çalışılmıştır. Çalışma dört ana konudan oluşmaktadır: Basel II ve bankacılık, Basel II' nin gelişmekte olan piyasalardaki bankacılık için anlamı, Türk Bankacılık Sistemi ve Basel II'nin Türk Bankalarındaki durumu hakkında açıklamalı ve güncel bilgiler verilmiştir.

Anahtar Sözcükler: Bankacılık Düzenleme ve Denetleme, Gelişmekte Olan Piyasa, SYR, Basel II, Türk Bankacılık Sistemi, Dokuzuncu Kalkınma Planı.

Introduction

While weakness of the banking sector is not the only element that generates fragility to economic crisis, banking regulation and supervision emerges as a major component of fragility to crisis. It is argued that as capital account liberalization intensifies capital mobility, this imposes a greater burden on a country to assure that its financial system is well supervised and regulated. It is asserted that strong banking systems can better handle reversals in capital flows, while weak and inefficient banking systems are less able to cope with volatile capital flows, therefore, are more fragile to contagion. They are more likely to propagate and magnify the effects of financial crises on other economies. Also, it is maintained that concerns about banking solvency or inadequate regulatory frameworks may encourage capital flight (Ganioglu, 2007, 13).

Bank regulators' primary concern must be with the stability of the banking system. They should also seek to ensure that the financial system operates efficiently. In doing that, they have to worry about incentives, about how the banks that they regulate will respond to regulations (Fischer, 2002, 3).

There exist mainly two approaches to measure the quality of banking regulation and supervision: evaluation of the letter of the law and surveys. Among the survey-based approach to collect information related to bank regulations and supervisory activities (Barth, Caprio and Levine, 2001).

Suggestion for banking reforms to prevent banking crises began without satisfactory information about the extent to which these regulatory and supervisory reforms increase or decrease the likelihood of a banking crisis. Additionally, there is very little information about the appropriate way to reform financial sector regulation and supervision in many countries. In view of the fact that capital requirements and regulatory standards recommended by the Basel Committee are designed for industrial countries, their appropriateness for emerging market countries have been rightly questioned in recent years especially in the face of severe banking crises (Suarez, 2005).

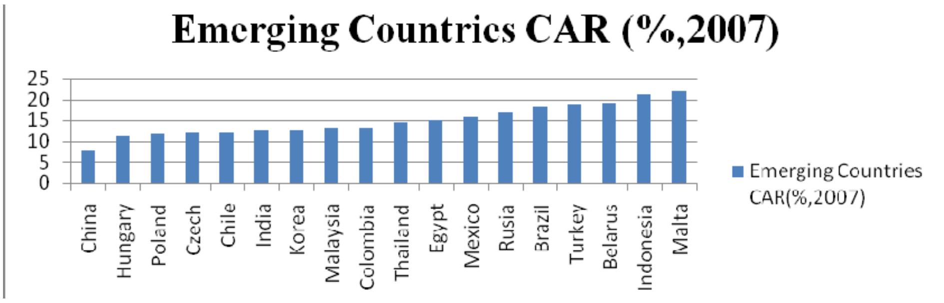
1. Basel II and Banking

Basel II Accord mostly prescribes good banking practice. Banks should get off the fence and use the new rules to promote change. Banks with risky portfolios may face higher regulatory-capital charges under Basel II, but such banks are in particular need of best-practice risk management. Regulators will look unfavorably on bigger banks that could participate but choose not to, unless they have some strong business reason (Buehler, 2004, 83). The Accord might be considered an effort to re-invigorate the risk management culture in the banking sector. At the same time, the Accord will assist to ensure that capital supervision continues to serve as a cornerstone to safety and soundness in the banking system. Both consequences will help to make banks more flexible, less sensitive to the difficulties of the business cycle, and better able to serve as a source of finance and growth for businesses and consumers (Caruana, 2004, 4). The same factors that make banks candidates for supervision and regulation have also made them vehicles to achieve desired social and economic objectives. Basel II provides banks with the incentives necessary to improve their risk management systems and processes (BCBS, 2008).

Basel II promises to accelerate the spread of securitization in banking. This will increase strategic complementarities between investment banking and the process of originating and underwriting bank loans. And many loan originators will see their better credits migrate to the capital markets. Because of high quality customers are learning to communicate their performance and condition more effectively. These tendencies will re-emphasize the importance of credit assessment and pricing skills at the point of loan origination. "On assets they do not choose to securitize, small banks will have to quote a risk premium high enough to justify the level of capital needed to support a riskier balance sheet" (Valverde, 2007, 393).

2. Basel II For Banking In Emerging Markets

For emerging economies, Basel II has debatably a more far-reaching impact. This is because of three factors (Aziz, 2008, 2-3): First one, many emerging economies continue to rely on the banking system to finance economic activity. With a few exceptions, commercial banks are the main suppliers of credit in most emerging economies, accounting for an average of 90% of total credit. This produces a higher correlation to the economic sectors where the implications on the banking system could result in significant disruptions to credit supply that could in turn affect economic activity. Secondly, the more advanced approaches of Basel II are calibrated to the environment of the G10 countries, with significant acceleration of capital charges as the probability of default ratings deteriorate. To the extent that this inappropriately amplifies economic cycles by inducing the systemic misperception of risk in emerging economies, this can exacerbate a credit crunch during periods of weak economic performance. Thirdly, the expectation of lower regulatory capital requirements and hence, a competitive cost advantage, provides a strong incentive for banks especially in the developed countries to move towards the more advanced approach under Basel II. This could result in an uneven competition between the domestic and international foreign banks operating in the domestic financial system. Capability gaps in the adoption of the more onerous approaches under Basel II may place domestic banks at a competitive disadvantage in such countries.



Graphic 1. Emerging Countries CAR

Probably their greatest concerns relate to the reliance on external rating agencies in the standardized approach to calculating minimum capital requirements. Many non-OECD countries do not develop domestic rating agencies. This suggests that in the short term, at least, most domestic credit risks will tend to end up in the unrated, 100%, category. Another result of putting most domestic credit risks in the unrated category would be that better-rated borrowers in those countries could borrow at lower cost from internationally rated than from local banks – leaving domestic banks at a competitive disadvantage in lending to high quality borrowers in their own countries (Fischer, 2002, 8).

3. Turkish Banking System

The number of banks operating in Turkey was 49 at the end of December 2008 with 32 in deposit banks group and 13 in non-deposit banks group, while there were also four in participation banks. Among deposit banks, there were three state-owned banks, 11 privately owned banks and 17 foreign banks.

The number of branches and employees continued to increase at a slower rate in October-December 2008 period. The total number of branches in the deposit banks and development and investment banks increased by 1,173 to 8,791 at the end of 2008 as compared to 2007 and by 247 as compared to September 2008. The number of branches increased by 214 in state-owned deposit banks, 665 in privately owned deposit banks, and 293 in foreign banks and one in development and investment banks as compared to December

Table 1. Number of Banks and Branches in the System*

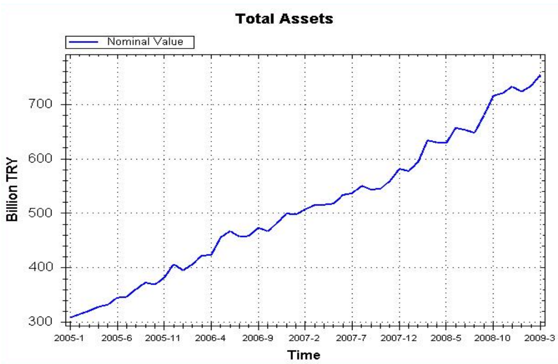
	December 2007		*December 2008*	
	Banks	**Branches**	**Banks**	**Branches**
Deposit banks	**33**	**7,570**	**32**	**8,742**
State-owned banks	3	2,203	3	2,417
Private banks	11	3,625	11	4,290
Banks in the Fund**	1	1	1	1
Foreign banks	18	1,741	17	2,034
Development and investment b.	**13**	**48**	**13**	**49**
Total	**46**	**7,618**	**45**	**8,791**

* *Branches in foreign countries and Turkish Republic of Northern Cyprus are included.*

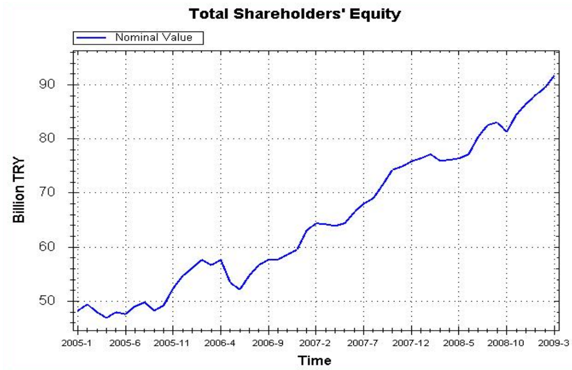
** *Banks under the Deposit Insurance Fund*

2007. The banking sector maintained its organic growth in 2008; the number of branches increased by 1187 and the number of personnel increased by 14907 to 171597 (See Table 1).

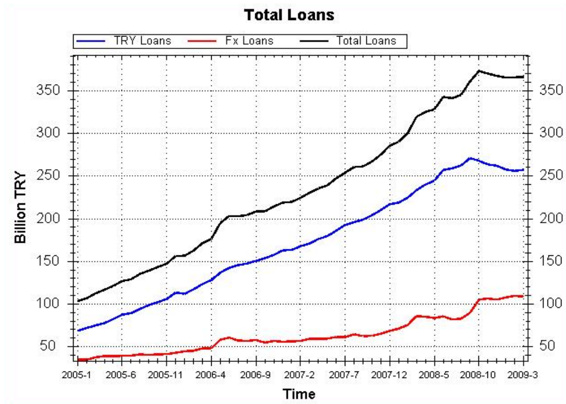
Regarding the education level of bank employees, 1% of the employees were primary-school graduates, 25% high-school graduates, 70% university graduates, and 4% had post-graduates degrees. As of December 2008, regarding the distribution of bank employees by sex, 49% of the employees was female. This ratio was 37% in state-owned deposit banks, 54% in private banks, 37% in the bank in the Fund, 54% in foreign banks and, 32% in development and investment banks (BAT, 2008).



The asset size of the Turkish financial sector was TL 947,7 billion in 2008, and the ratio of financial sector assets to GDP is realized as 99,8%. In 2008, the total assets of the Turkish banking sector increased nominally by 26% when compared to the end of previous year to TL 733 billion. While there are no important changes in the conduct of the increase of total assets, the increase in loans seems to be slowed down relatively. While the share of banking sector TL assets in total decreased to 69,7%, the share of TL liabilities within total liabilities decreased by 1.4 points to 65,1 % when compared to previous quarter (Graphics 2 and 3).

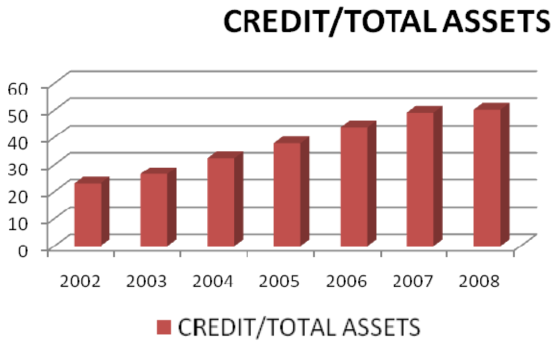


Graphic 2. Total Assets



Graphic 3. Total Loans and Total Shareholders' Equity

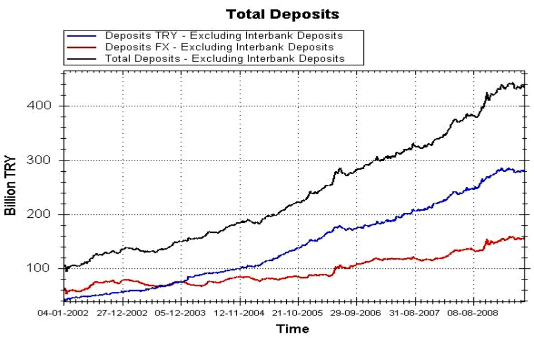
Share of public securities in Turkish banking sector assets declined by one-third to 28% in the last 5 years; while share of credits to private sector more than doubled and reached to 49% during the same period (Graphic 4).

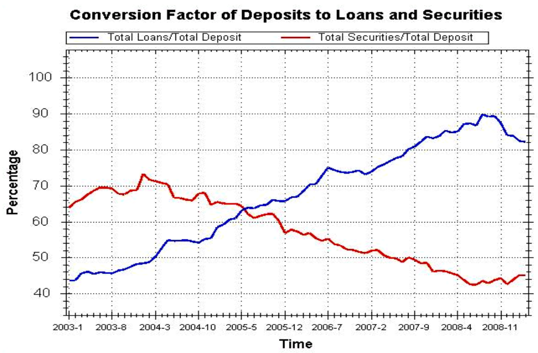


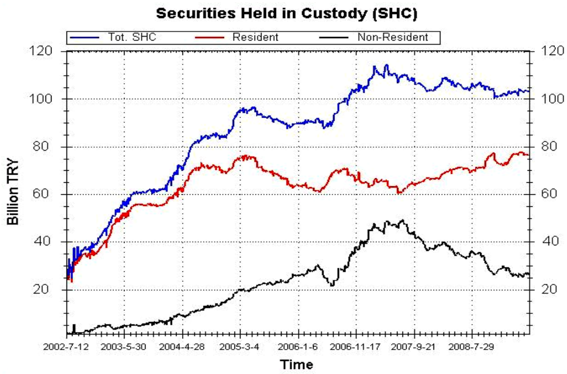
Graphic 4. Credit / Total Assets

The credits extended to the SMEs by Turkish banking sector have also increased significantly to USD 95 billion as of 2007. This corresponded to almost 20% of the GDP. As a further note, 32% of these credits were in the category of credits extended to micro enterprises. The ratio of private sector credit used by households and firms to GDP has also rapidly increased, though it is still low in international standards (Yilmaz, 2008, 2-3).

When the global economic crisis is considered, it is seen that the growing performance of Turkish banking sector makes important contribution to the economy. The portfolio investments of domestic residents increased by 18,7% when compared to previous year to TL 544 billion, while total amount of investments of residents abroad is realized as USD 67 billion. GS investments of residents abroad decreased compared to previous period, while their deposit increased. In 2008, stock investments of domestic residents decreased by 35,5%, and the stock investments of residents abroad decreased by 40,6%. Deposit-weighted resource structure of banking sector continues, of deposit that comprises 62% of total liabilities as of 2008 (Graphic 5).







Graphic 5. Total Deposit, Securities Held in Custody and Conversion Factor of Deposit to Loans and Securities

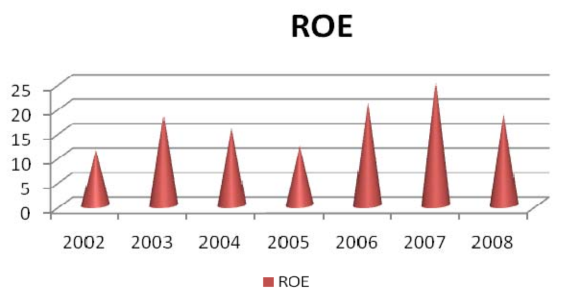
Resources from foreign markets due to the increases in borrowing costs in consequence of the global crisis experienced no evident change throughout 2008. However, as no serious deterioration was experienced in the current macroeconomic outlook of Turkish economy and banking sector maintains its strong condition as well as good risk management practices assist the procurement of the said resources despite the cost increase.

When the credit risk of banking sector in 2008 is analyzed, it is seen that it followed a process in the sector in parallel to the previous period. As of 2008, NPL amount increased by 28.7% when compared to the previous year. The decrease in the ratio of provisions set aside to NPL continues in this period.

Commercial portfolio decreased by 26.2% in the last quarter of 2008, when compared to the previous quarter and realized as TL 76.9 billion. The most important factor in the said decrease is the legal amendment made on accounting securities.

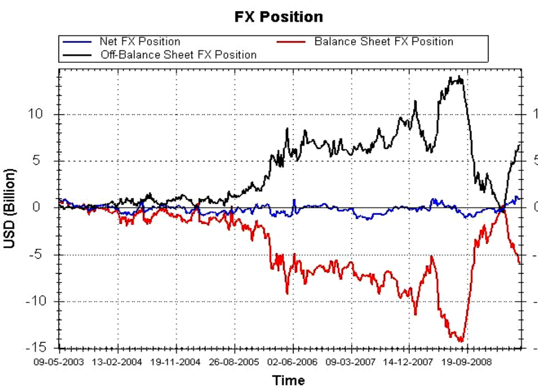
As of 2008, profitability of banking sector decreased by 10.5% when compared to 2007. In the same period, high increase in non-interest expenses when compared to non-interest incomes affects the profitability of the sector negatively. Distribution of income items within total incomes displays that the customer-focused profitability tendency continue in the sector.

As a matter of fact, interest from loans, fees and commissions and banking service incomes constitute 64.6% of total incomes. It is observed in the weights of expense items of the sector in total expenses that interests to deposit constitute 54% of total expenses. Hence, deposit weighted finance structure continue in the sector.



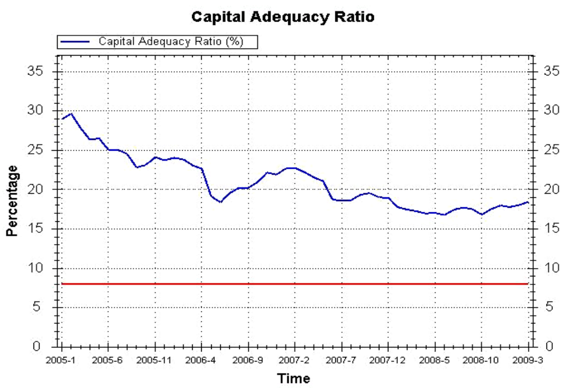
Graphic 6. Return on Equity

Short-term liquidity ratios comfortably meet the legal thresholds. In all banks groups, it is observed that FX liquidity adequacy ratios and total liquidity adequacy ratios concerning daily and second-maturity tranche were realized above the determined threshold. Throughout the sector, that FX liquidity adequacy ratio concerning the second-maturity tranche increased by 3.5% and total liquidity adequacy ratio increased by 4%.



Graphic 7. FX Position

CAR of the banking sector stood at 18%, well above the minimum legal requirement of 8% and the average of the European Union, which is 12.1%. CAR which was 17.5% in September 2008 period was realized as 18% as of December 2008. The increase by 0.5 points observed in the last quarter stem from the fact that own-funds of the sector increased higher than the increase in risk weighted assets. It is considered that the sector maintains its prudential approach by preserving its strong capital structure against the possible deteriorations. In fact, paid-up capital of the sector increased by 4.7% in the same period. Despite the rapid rise in shareholders' equity, CAR decreased because of the inclusion of operational risk to the calculation of CAR and increase in loan volume. The impact on capital adequacy standard ratio from the inclusion of operational risk to capital adequacy calculations was found as 2.9% points according to the calculation based on September 2007 balance sheets. This impact was 2.6% points for deposit banks and 10.8% points for development and investment banks.



Graphic 8. Capital Adequacy Ratio (%)

On the other hand, the implementation of the Basel II for rating-based calculation of the credit risks for the basis of measurement of banks' capital adequacies as planned under the road map for transition to Basel-II was postponed to a later date than 2009 (BAT, 2008, 51-52).

Table 2. Impact of Operational Risk on Capital Adequacy

	Excepting operational risk	*Including operational risk*	*Difference*
Deposit banks	20.4	17.8	2.6
State-owned banks	25.9	20.8	5.1
Private banks	19.2	17.2	2.0
Foreign banks	17.5	15.6	1.8
Development and investment b.	77.2	66.4	10.8
Total	**22.4**	**19.5**	**2.9**

Source: BAT, 2009

In Summary, during and after the restructuring program, the banking sector has entered a high and stable growth period, and the total assets of the sector, which was TL 104 billion in 2000, grew by seven-fold in 8 years and reached TL 733 billion. There has been a consolidation in the sector, and concentration has increased. With the success of the program, the weight of public banks in the system has decreased. The capital structure of the sector has strengthened; and the CAR that was 9.3% in 2000 rose to 18% as of end-2008. The profitability performance of the sector has improved and its asset quality has stably improved; while one quarter of loans were non-performing in 2001, the rate of non-performing loans fell below 4% in 2008. The financial intermediation has started to operate effectively, and the share of loans in the total assets of the sector rose to 50% in 2008, from 23% in 2001 (Table 3).

Table 3. Fundamental Banking Indicators in Turkey (1998-2008)

	1998	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Total Assets*	36,8	72,1	104,1	173,4	212,7	249,7	306,4	406,9	499,7	581,6	732,5
Loans*	13,1	19,9	31,8	38,0	49,0	66,2	99,3	156,4	219,0	285,6	367,4
Securities Portfolio*	5,2	12,4	12,0	17,5	86,1	106,8	123,7	143,0	158,9	164,7	194,0
Deposit	21,8	43,4	58,9	110,4	138,0	155,3	191,1	251,5	307,6	356,9	454,6
Equities*	3,3	4,2	7,2	18,3	25,7	35,5	46,0	54,7	59,5	75,8	86,4
No. of Banks	75	81	79	63	54	50	48	51	50	50	50
No. of Branches	7740	8104	8298	7386	6160	6029	6440	6240	6911	7700	8768
CAR (%)	13,00	8,24	9,29	20,78	25,34	30,93	28,24	23,73	21,91	18,94	17,98
Retail Loans / Loans	5,3	4,9	12,5	6,3	4,5	9,7	12,8	18,8	21,7	23,8	22,6
NPLs /Gross Loans	7,2	10,5	11,1	25,2	17,6	11,5	6,0	4,8	3,8	3,5	3,7
Loans /Deposit	60,3	45,9	54,1	34,4	35,5	42,6	52,0	62,2	71,2	80,0	80,8
Term Profit*	0,8	- 0,3	-3,1	-10,5	2,9	5,6	6,5	6,0	11,4	14,9	13,4
ROA [1]	2,1	-0,4	-3,0	-6,1	1,4	2,5	2,3	1,7	2,5	2,8	2,0
ROE	23,1	-7,2	-43,7	-57,5	11,2	18,1	15,8	12,1	21,0	24,8	18,3
FXNGP/Equities (%)[2]	N/A	N/A	N/A	N/A	N/A	1,1	-0,5	-0,6	1,0	0,3	-0,6
Tot. Ass.Share of First 10 B.	67,6	67,5	69,2	79,5	80,8	82,3	84,0	82,9	83,5	82,5	82,8
Share of Global Capital[3]	5,6	7,1	3,4	3,0	3,3	3,0	3,5	6,3	13,1	14,0	17,0
Funds from Abroad ($ Bl.)	2,5	3,2	3,8	2,8	11,0	17,0	22,0	36,2	49,4	60,6	61,6

Source: BRSA

* Billion TRL. Participation banks are included as of 2005 period.

1. In ROA and ROE ratios, assets and equities are included in the calculation averagely.
2. Foreign development and investment banks before 2002 are not included. In ROA and ROE ratios, assets and equities are included in the calculation averagely.
3. The calculation in which 50% or more, bank's assets are controlled.

4. Turkish Banks and Basel II

How Turkish banks should react to the impending new rules. By contrast, some - mainly European banks have used early drafts of Basel II to prepare for what they see, despite the uncertainties, as inevitable changes in capital standards. Banks in emerging markets are lagging behind. Those in China and India have opted out entirely, claiming that the accord is too complex. In line with international developments, Turkey had started works in 2002 for incorporating the infrastructural elements of Basel-II to the Turkish banking system.

Basel-II Working Committee was established at the BAT by the participation of BRSA officials and top managers of various banks in March 2003 and was charged with risk management for the purpose of instruction of banking system about Basel-II, expression of the banking system's opinions about the subject regulations, and formation of a joint strategy. This Committee had some works under various headings for transition to Basel-II. Then, Basel-II Coordination Committee was established by participation of the officials of BRSA, Treasury Under secretariat, the Central Bank, the Capital Markets Board, the BAT, and some individual banks for the purpose of creating an efficient discussion platform in the process of preparations for Basel-II and making works on various technical subjects for Basel-II (BAT, 2009, 51) One of the major works of Basel-II Guidance Committee was to prepare the "Road Map for Transition to Basel-II" as an efficient planning of the process of transition to Basel-II through receiving the opinions of and in consultation with the banks. BRSA announced to public this report in May 2005.

Basel Committee's third Quantitative Impact Study was participated by six banks with a high share in the Turkish banking system within this framework. Benefiting from the experience of QIS–3, a domestic quantitative impact analysis study (QIS-TR) was performed in July 2003 with participation of 23 banks making up 95% of Turkish banking sector in terms of asset size. That was followed by QIS-TR2 study that was performed based on the data of September 2006 period with the participation of 31 banks representing approximately 97% of the sector's total assets. QIS-TR2 was performed during October 2006-June 2007 period. The CAR of the participant banks is decreasing by 5.6 points to 13.7% with Basel-II while this ratio is 19.3% according to the current legislation (BAT, 2009, 51).

According to Ninth Development Plan, it is determined that the most important factors that contribute negatively to CARs with the convergence to Basel-II are the rise of the risk weight of FX public securities included in public portfolio and trading portfolio to 100% . The inclusion of operational risk to capital adequacy calculations and the implementation of 100% risk weight for most of the institutional loans since most of the customers in institutional portfolio do not have formal credit rating. Besides the studies related to Basel-II, it is planned to test the software for the implementation of computer supported on-site supervision, to complete the researches related to the measurement of interest rate risk of banks and the implementation of audits for the adaptation of non-bank financial institutions to new legislation. Additionally, it is planned that Financial Sector Commission, which was formed in order to ensure confidence, stability and development in financial markets, provide coordination and exchange of information between institutions and make common policy proposals, will start to produce concrete outputs/outcomes with the determination of sub working subjects. Implementation of on-site supervisions for the adaptation of non-bank financial institutions, renovating of reporting format and the completion of banking performance-reporting system are other priorities for the year 2007.

Turkey constitutes a very typical example: while under the current regulations it is attributed 0% (OECD club rule) exposure risk, it will receive a much higher risk weight from now on, with its rating of BB- (receiving 100% under the SA). For sure, the yield spread for its bonds in the international markets or the rates at which Turkey borrows from financial institutions do reflect its level of risk represented by its grade. However, under the new Framework apart of the pricing, the capital requirement that this exposure will bring, becomes a more crucial input, perhaps decreasing in turn the willingness to lend to such sovereigns.

Turkey currently pays the highest interest rates among IMF debtors. Around 60% of Turkey's foreign debt is owed to banks; with nonblank financial institutions, this percentage goes up to 80%.

There is one outcome of the removal of the OECD criteria for Turkey. Turkish banks that receive a 20% risk weight under the current framework will be receiving risk weights in line with their ratings, i.e. 100% under the SA and something corresponding to BB+ to B+. Their ratings must be between AAA to A-, which does not seem probable in the near future. Yet, for their rating bracket (BB+ to B-); there exists one option for applying 50% in lieu of 100%: each time extending them loans with an initial maturity of less than 3 months. This has the potential to decrease the overall maturity of lending to Turkish banks and thus increasing the volatility since the renewal of the loans will take place more frequently.

The funds borrowed from foreign banks, institutions and funds constitute 7% of the total bank liabilities in Turkey, which is not negligible. Therefore, the fact that for ratings corresponding to risk weights of 50% or 100%, depending on the maturity, it is no more possible to borrow at rates for 20% risk treatment for the Turkish banks becomes even more important (TSPAKB, 2008, 66-67).

Conclusion

Basel II shall eventually result in a freer market in bank corporate control; better performance standards; incentive-compatible safety nets; 'no bail-out' policies; and more-transparent accounting standards.

Supervision and regulation mechanism's effectiveness, stability and independence should be ensured that are being tried to be created in Turkish banking sector. In the world, some studies and preparations have been going on for several years regarding Basel II. In general, it is seen that European banks are more on standby compared to USA and Asia banks. All banks in EU will be responsible for carrying out Basel II criteria that will be integrated with EU regulations and laid out by EC. Because of this, Turkish banking sector should also handle preparation process to Basel II within accommodation to EU norms.

REFERENCE

1. Aytul Ganioglu, Prudential Regulation and Supervision of the Banking Sector and Banking Crises: A Cross Country Empiricial Investigation, **BDDK Bankacılık ve Finansal Piyasalar**, Cilt: 1, Sayı: 2, 2007.
2. BAT, Statistical Reports, Banks, Branches and Employees, December 2008.
3. BAT, 50th Anniversary of The Banks Association of Turkey And Banking System "1958–2007", Publication No: 62, March 2009, http://www.tbb.org.tr/english/50/TBB50-english.pdf (2 May 2009), p.51.

4. BCBS**,** Proposed revisions to the Basel II market risk framework, July 2008, http://www.bis.org/publ/bcbs140.htm (1 February 2009).

5. Christopher L. Gilbert, Gregor Irwin and David Vines, "International Financial Architecture, Capital Account Convertibility and Poor Developing Countries", **Capital Account Liberalisation: The Developing Country Perspective**, London: Overseas Development Institute, 21st June 2000, pp.9–12.

6. Durmuş Yilmaz, "Access to finance and capital markets development", **XIIth Euro-Mediterranean Conference on Economic Transition,** Bruxelles: BIS, 20 February 2008. pp 2–3.

7. Jaime Caruana, "Basel II - emerging market perspectives", Bankers' Conference 2004, New Delhi, 11 November 2004.

8. James R. Barth, Gerard Caprio and Ross Levine, "Bank Regulation and Supervision: What Works Best?" , *World Bank Policy Research Working Paper*, 2725, 2001.

9. Kevin S. Buehler, Vijay D'Silva and Gunnar Pritsch, "The Business Case for Basel II", **McKinsey Quarterly**, No. 1, 2004, p.83.

10. Rojas-Suarez, Comments on Panel:Basel II and Emerging Markets, London School of Economics, April 2005, http://fmg.lse.ac.uk/upload_file/393_Liliana%20Rojas-Suarez.ppt *(8 November 2008).*

11. Santiago Carbo-Valverde, "Implications of Basel II for different bank ownership patterns in Europe", **Atlantic Economic Journal**. Vol. 35, No. 4, December 2007, pp.391-7.

12. Stanley Fischer, "Basel II: Risk Management and Implications for Banking in Emerging Market Countries", **International Conference of Banking Supervisors**. Cape Town: Citigroup. 19 September 2002, http://www.petersoninstitute.org/fischer/pdf/fischer091902.pdf (18 June 2007).

13. TSPAKB,Turkish Capital Markets & The Brokerage Industry 2007, Istanbul, July 2008, TSPAKB Publication No. 35, http://www.tspakb.org.tr/eng/Portals/57ad7180-c5e7-49f5-b282c6475cdb7ee7/AIM_Yayin_ve_Raporlar_Arastirma_Raporlari_TCMBI_Report_Baski_20080714.pdf

14. Undersecretariat of State Planning Organization, Ninth Development Plan (2007-2013) 2008 Annual Programme, http://ekutup.dpt.gov.tr/program/2008i.pdf (8 April 2009), p.104

15. Zeti Akhtar Aziz, "Basel II implementation and the development of Asia's financial system – experiences, challenges and regional cooperation", **the 4th SEACEN/ABAC/ABA/PECC Public-Private Dialogue for the Asia Pacific Region,** Kuala Lumpur:BIS, 18 August 2008, http://www.bis.org/review/r080819a.pdf (19 January 2009) pp.2–3.