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**THE IMPACT OF OWNERSHIP STRUCTURE
ON EARNINGS MANAGEMENT THROUGH AVAILABLE FOR
SALE SECURITIES: AN ASSESSMENT OF IAS 39
IN TURKISH BANKING INDUSTRY**

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Seçil VARAN tarafından hazırlanmış ve sunulmuş "The Impact of Ownership Structure on Earnings Management Through Available for Sale Securities: An Assessment of IAS 39 in Turkish Banking Industry" başlıklı tezi kabul edilmiştir.

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I hereby declare that this doctoral thesis titled as “**The Impact Of Ownership Structure On Earnings Management Through Available For Sale Securities: An Assessment Of IAS 39 In Turkish Banking Industry**” has been written by myself in accordance with the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resources in the reference list. I verify all these with my honour.

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ABSTRACT
Doctoral Thesis
Doctor of Philosophy (PhD)
The Impact of Ownership Structure on Earnings Management
Through Available for Sale Securities:
An Assessment of IAS 39 in Turkish Banking Industry
Seçil VARAN

Dokuz Eylül University
Graduate School of Social Sciences
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This study mainly aims to analyze the impact of ownership structure; an attribute of corporate governance; on bank earnings management by the use of fair value accounting rules. The discretionary use of the fair value accounting rules for Available for Sale Securities (AFS) according to IAS 39 is analyzed. Earnings management is measured by the frequency distribution and specific accrual approaches. The findings suggest that, Turkish Banks manage earnings to avoid reporting losses through the timing of realized gains of AFS. Additionally, ownership structure significantly affects earnings management behavior of banks in Turkey. Specifically, the existence of foreign and domestic institutions as multiple large shareholders in the ownership structure, constrains earnings management practices of Turkish Banks, however ultimate control by foreign shareholders increases earnings management.

Keywords: Earnings Management, Corporate Governance, Banks, Fair Value Accounting, IAS 39

ÖZET

Doktora Tezi

Ortaklık Yapısının Satılmaya Hazır Finansal Araçlar ile Kar Yönetimine

Etkisi: Türk Bankacılık Sektöründe TMS 39'un Değerlendirilmesi

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Bu çalışma, bir kurumsal yönetim mekanizması olan ortaklık yapısının, gerçeğe uygun değer muhasebesi kuralları ile kar yönetimine etkisini incelemektedir. Satılmaya hazır finansal araçlar ile ilgili gerçeğe uygun değer muhasebesi kuralları UMS 39 kapsamında incelenmiştir. Kar yönetiminin ölçülmesinde kazanç dağılımı ve belirli tahakkuklar yöntemleri kullanılmıştır. Çalışmanın bulgularına göre Türk bankaları, zarar yerine kar raporlama hedefleyerek karlarını yönetmekte ve kar yönetiminde satılmaya hazır finansal varlıkların gerçekleşmemiş karlarını araç olarak kullanmaktadır. Çalışmada ayrıca ortaklık yapısının kar yönetimi uygulamalarındaki anlamlı etkisi ortaya konmuştur. Analiz sonuçlarına göre, ortaklık yapısında yabancı ve yerli hissedarların kontrolü paylaşması kar yönetimi uygulamalarını kısıtlarken, yabancı hissedarların tek hakim hissedar olmaları kar yönetimi uygulamalarının arttırmaktadır.

Anahtar Kelimeler: Kar Yönetimi, Kurumsal Yönetim, Bankalar, Gerçeğe Uygun Değer Muhasebesi, UMS 39

**THE IMPACT OF OWNERSHIP STRUCTURE ON EARNINGS
MANAGEMENT THROUGH AVAILABLE FOR SALE SECURITIES: AN
ASSESSMENT OF IAS 39 IN TURKISH BANKING INDUSTRY**

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ABBREVIATIONS

| | |
|---------------|---|
| AFS | Available For Sale |
| BRSA | Banking Regulation and Supervision Agency |
| CEO | Chief Executive Officer |
| EM | Earnings Management |
| EU | European Union |
| FASB | Financial Accounting Standards Board |
| FVA | Fair Value Accounting |
| FVTPL | Fair Value through Profit or Loss |
| FVTOCI | Fair Value through Other Comprehensive Income |
| HCA | Historical Cost Accounting |
| HTM | Held to Maturity |
| IAS | International Accounting Standards |
| IASB | International Accounting Standards Board |
| IFRS | International Financial Reporting Standards |
| LLP | Loan Loss Provisions |
| LR | Loans and Receivables |
| ROA | Returns on Assets |
| SFAS | Statement of Financial Accounting Standards |
| UK | United Kingdom |
| US | United States |

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INTRODUCTION

Banking Industry is vital in the economic development of a country; however banks play a major role in the financial crises as well. One of the main differences among the other industries and banks is the prospect of the contagion effect that the economy faces, following a failed bank. In other words, failure of one bank may serve as an infectious disease in the financial system. The risk of a financial crisis and its' consequences multiply the significance of the financial reporting environment of banking industry.

The recent global financial crisis of the late 2000s that is triggered by the US Subprime mortgage crises, called attention to the opacity of the banks' financial reports. Throughout the crises period, fair value accounting has been blamed for contributing and deepening the financial crisis and generating opportunities for earnings management (EM). In fact, fair value accounting was the replacement of the traditional historical cost regime that was blamed as well for its inadequateness in US Savings and Loans Crises and Japanese banking crisis in 1990s, by hiding the insolvency of many financial institutions.

However, although the Savings and Loans Crises had shifted the accounting paradigm, the accounting standards setters have concluded that fair value meets the objective of financial reporting by providing more relevant information than the other measurement bases considered, thus did not take a step back.

Facing the critics of fair value accounting, Barth and Landsman (2010: 401) specify that accounting methods are not responsible of determining how best to ensure the stability of the financial system, whereas financial stability is the task of the regulators.

EM on the other hand, is the use of judgment in financial reporting by managers to beat a specific threshold in reported earnings. Accounting information aims to mitigate agency problems resulted from information asymmetries (Beatty and Harris, 1998: 300). EM however, masks the real performance and lessens the ability of shareholders to make informed decisions that maximize their welfare, exacerbating agency costs (Xie et al., 2003: 297).

Furthermore, EM should be mitigated since any alteration in reported earnings intensifies the opacity of the financial reports. In case of banking industry, the opacity of banks' financial reports exposes the whole financial system to bank runs, contagion, and other strains of systemic risk (Morgan, 2002: 874).

Laux and Leuz (2009) imply that "*Setting accounting standards always involves tradeoffs, and any accounting regime will have costs and benefits*" (Laux and Leuz, 2009: 828).

Accounting standards and methods are continuously modified, changed, and amended. EM research should not be centered upon the desirability of accounting methods; as the discretion in any accounting methods may be manipulated, the opportunistic managers are the ones to be blamed for earnings management, not the accounting rules (Barth and Taylor, 2010: 32).

Literature explores the mechanisms that mitigate earnings management on the grounds of corporate governance literature. Agency theory argues that corporate governance and accounting information are linked (Bushman and Smith, 2001; Sloan, 2001; Bhat, 2008). Cohen et al (2004: 87) suggest that one of the most important functions of corporate governance is ensuring the quality of the financial reporting process. Strong corporate governance mechanisms have the potential to mitigate managerial opportunism (Song et al., 2009:14).

Corporate Governance addresses agency problems related to the information asymmetries between agents through internal and external controlling mechanisms.

One of the main internal mechanisms of Corporate Governance is the ownership structure of firms. However, literature provides conflicting evidence on the determination of the optimum ownership structures that mitigate EM most likely due to the "One size does not fit all" argument.

This study mainly aims to analyze the impact of ownership structure on bank EM. It is expected that the discretionary use of fair value accounting rules will decrease in the presence of sound corporate governance mechanisms.

Regarding to the motivations and contributions of the thesis, firstly, this study aims to contribute to the ongoing debate on the discretionary use of the fair value accounting rules in the context of International Financial Reporting Standards, by providing empirical evidence on the banking system of an emerging country.

Considering the warnings of Barth and Taylor (2010: 401), fair value accounting rules are used as an indicator of managerial opportunism, since any accounting method may be subject to changes.

Secondly, extant literature examining EM mostly focuses on US banks that the financial system is capital markets based. Contrarily, Turkey has a bank based financial system, and due to the severe experiences in banking crises and the following banking reforms, Turkish banking industry is comprised of a small number of banks, yet dominated by a few.

During the period between 1994 and 2003, a total of 25 banks were exposed to expropriation in Turkey. Nearly 36,000 bank employees (out of a total of 174,000) were made redundant and more than \$25 billion was spent restructuring the banking system (Erbil and Salman, 2008: 6). Following the 2001 crisis, the Banking Regulation and Supervision Agency (BRSA) initiated the “Banking Sector Restructuring and Rehabilitation Program” in 2002. First, the weak banks were cleared from the system; followed by regulations on capital adequacy and external reporting; limited deposit insurance system design; and finally, on November 1, 2005 a new Banking Law was introduced with Corporate Governance standards.

The efforts of the BRSA came to fruition as of the end of 2008. The global financial crisis affected the Turkish economy negatively; yet the sound performance, specifically the profitability of the banks was the focal point of the public and press in Turkey. The press releases of the public units called attention that the profitability of the sector was stable throughout the recent global crisis, and the capital adequacy ratio of the banks was higher than the banks of other Western countries.

However, according to the Banking Association of Turkey general secretary, Ekrem Keskin’s press release on 27 May 2009, “*The margin between the profit rates of banks and the rate of return of the Treasury bills is positive only for a single group - the public banks. It is negative for the private banks and the foreign banks in Turkey*”. Throughout 2006-2010, solely four percent of the banks reported losses, ten percent recorded high profits, while remaining was very near to zero in terms of return on assets.

Although the continuous regulation process of BRSA led to a more stable banking system, the disparity of the profits and the recent public scrutiny of bank

performances in Turkey after the severe experiences in banking crises may have caused the bank managers to manage earnings. Nevertheless, as far as detected, although literature provides substantial evidence on the performance and efficiency of Turkish banks, evidence on the EM practices is limited to a few cross country evidence (e.g. Karagetnetnam et al, 2010; Curcio, 2008). Moreover, it is not possible to distinguish Turkish banks' EM practices due to the pooled data in these studies. Literature that is focused on earnings management in Turkish companies on the other hand, excludes financial institutions from their samples.

Due to the serious consequences of the past financial crises, the level of the opacity of banks' financial reports is crucial for Turkish economy. More evidence is needed on the EM practices of the banks in emerging countries.

Third motivation is the significant change in ownership structure of Turkish banks by 2006. The regulatory developments in the sector and the commencement of the official EU accession talks for Turkey in 2005, led foreign banks increase their investments in the country, increasing their numbers and their shares in the system. Consequently, as of 2006, in comparison with the previous year, the total asset share of foreign banks rose up to thirteen from five percent; the total loan share rose up to sixteen from seven percent; and the total deposit share rose up to twelve from five percent.

Consistent with "one size does not fit all" argument, the financial system of a country and its' cultural factors may cause differences in corporate governance practices that best deal with agency conflicts. In case of Turkish banking sector, the banks dominantly have concentrated ownership structures. Therefore, when foreign ownership exists, foreign institutions are either the ultimate owners or they may merge with a domestic partner as a second large shareholder forming an ownership structure with multi large shareholders.

Foreign entry in Turkish banking industry is widely criticized recently. Research provides substantial evidence on the effects of foreign shareholders on domestic banks in terms of competition, performance, and risk taking; whereas no evidence is detected for the effects of foreign entry on agency costs. Findings of this study may shed light on one other aspect of foreign entry; whether the presence of foreigners mitigated or enhanced the earnings management practices of banks.

Moreover, the results of this study are expected to provide evidence on the sound ownership structures for reducing the opacity of the bank financial reports, under recent changes in the accounting standards.

Fourthly, although managers may engage in EM via variety of tools, research determines two major instruments that bank managers use to manage earnings. Banks engage EM mainly by the strategic timing of realized gains and losses using available for sale securities and/or altering loan loss provisions. In Turkey, loan loss provisions as the usual suspects of EM in banks are highly regulated and audited by BRSA. However, the timing of realized securities gains and losses using available for sale securities is a relatively unregulated and unaudited discretionary choice.

Moreover, the downward trend of the interest rates and fair valuations of investment securities that are dominated by Treasury bills and bonds generated profits for banks during the period of 2006-2010, and it is observed that the proportion of fair value through profit or loss category in total assets of banks diminished from eight to four percent, while available for sale securities maintained at eleven percent. The realized or unrealized profits of fair value through profit or loss category are recognized in net income of Turkish banks under the rules of IAS 39. Though the unrealized profits of available for sale category is not recognized in net income until they are realized. The fall in interest rates may have widened the window of opportunity of managing earnings by timing the realized security gain and losses of available for sale securities. Additionally, the findings of this study might provide insight on the effectiveness of BRSA regulations on loan loss provisioning.

Lastly, this study is the first to examine the effect of large shareholder heterogeneity on EM in the context of foreign and domestic shareholding. Cronqvist and Fahlenbrach (2007: 30) call attention that the current literature that examines multiple large shareholders ownership structure, ignores the fact that the large shareholders are heterogeneous as they differ from each other in investment and governance styles, and the more heterogeneous the large shareholders are, the less earnings management is observed (Trainer, 2011: 28). The findings of this thesis contribute to this line of Corporate Governance literature as well, by providing evidence from the banking industry.

The main objective of this study is to explore the impact of ownership structure on EM through Available for Sale Securities in banking industry.

However, since there is limited evidence on the EM practices of Turkish banks, and based on the above motivations, the following research questions are addressed:

- Do Turkish banks manage earnings?
- Do Turkish banks manage earnings through Available for Sale Securities?
- Do Turkish banks manage earnings through Loan Loss Provisions?
- Which ownership structure constrains/enhances the EM practices of Turkish banks?

This study analyzes all deposit banks in Turkish banking industry for the period of 2006-2010.

To measure earnings management the frequency distribution and specific accrual approaches are followed.

The findings suggest that Turkish Banks manage earnings to avoid reporting losses through timing the realized gains of available for sale securities and foreign ownership structure significantly affects EM behavior in Turkey.

When foreign institutions merge with domestic shareholders as multiple large shareholders, this ownership structure constrains EM practices of Turkish Banks, however ultimate control by foreign shareholders enhances EM.

The findings are also consistent with the argument that the regulations of BRSA are efficient in constraining discretion in loan loss provisioning whereas the ultimately foreign ownership structure may mitigate the effects of the regulations which might be attributable to the entrenchment effect.

This thesis proceeds as follows. First chapter of the study reviews earnings management literature aiming to explore the reasons and the main tools of this behavior, and to choose the appropriate method to achieve the aims of the study. Second chapter reviews the literature on fair value accounting, and the main goal of this chapter is to assess the impact of the accounting treatment of available for sale securities on reported earnings. Third chapter reviews the Corporate Governance

literature and the effects of ownership structure on agency conflicts. Fourth chapter aims to analyze Turkish banking industry and to demonstrate the importance of the period after 2006 in terms of the changes in the ownership structure and the regulatory environment. Chapter five develops the hypothesis and describes the methodology of the thesis. Chapter six includes the analysis and the findings, followed by the conclusions of the thesis.

CHAPTER ONE

LITERATURE REVIEW ON

EARNINGS MANAGEMENT IN BANKS

This chapter examines the literature in order to understand the incentives, types, and methods of EM, specifically for banks. This chapter also provides a detailed literature review on earnings management measurement in order to choose the appropriate method to achieve the goals of the study.

This chapter proceeds as follows. Section one provides the definitions of earnings management and the role of incentives on defining EM. Second section presents main forms of EM. Section three focuses on EM measurement and presents the three major approaches in research as total accruals, specific accrual, and threshold approaches with their pros and cons. Section four asks whether bank incentives to manage earnings differ from other firms. Sections five and six provide a literature review on bank EM and main tools that banks use to manage earnings. Section seven summarizes the chapter.

1.1. THE ROLE OF MANAGERIAL INCENTIVES IN DEFINING EARNINGS MANAGEMENT

Earnings management (EM) is extensively examined and the definitions of Schipper (1989: 92) and Healy and Wahlen (1999: 368) are widely accepted in accounting research as:

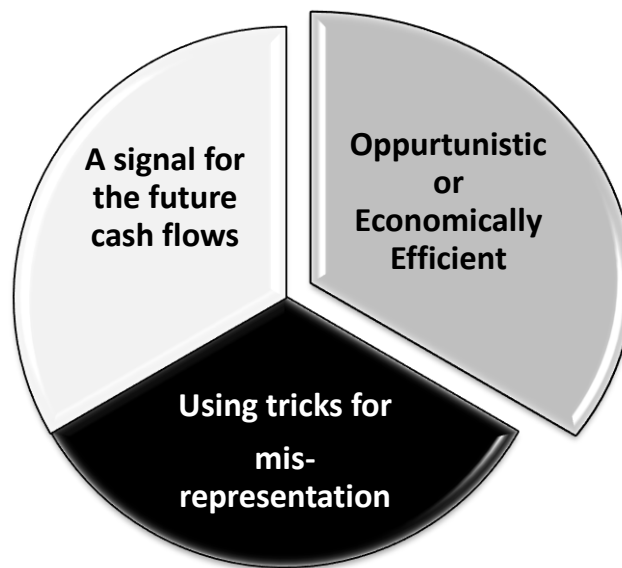
“A purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain”. (Schipper, 1989: 92)

“EM occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers” (Healy and Wahlen, 1999: 368).

According to these definitions, the scope of “EM” is wider than managing solely “earnings”, and comprises any accounting manipulation practices within the laws and standards. It is crucial here to note that “accounts manipulation” may be categorized as “fraud” and “earnings management”. Fraud covers illegal activities, whereas EM is within the limits of laws and standards.

According to Ronen and Yaari (2008: 25), there are three alternative classifications of EM that are white, gray, or black as illustrated in Figure (1). White EM occurs when managers take advantage of the flexibility in the accounting choices to signal their private information on future cash flows which can be even useful for investors. Grey EM occurs when managers choose an accounting treatment for opportunistic and economic purposes. And if the managers use tricks to misrepresent financial reports, it is classified as black EM.

Figure 1: Alternative Classifications of EM



Source: Ronen and Yaari (2008: 25)

Ronen and Yaari (2008) categorize the definitions of Schipper (1989) and Healy and Wahlen (1999) as black EM. Dechow and Skinner (2000: 238) points out the difficulties of using these definitions in empirical research, since EM is defined in “broad sense” and based on managerial intent which is unobservable. Therefore, for the objective of this research, EM should be defined based on an “observable”

managerial intent, however in a narrower sense, focusing on “earnings” as an attribute of the firm’s economic performance.

Healy and Wahlen (1999: 370) classify the many different managerial incentives of EM by reviewing the literature as: 1) Capital Markets Motivations and Valuation 2) Contractual Incentives 3) Regulatory Incentives.

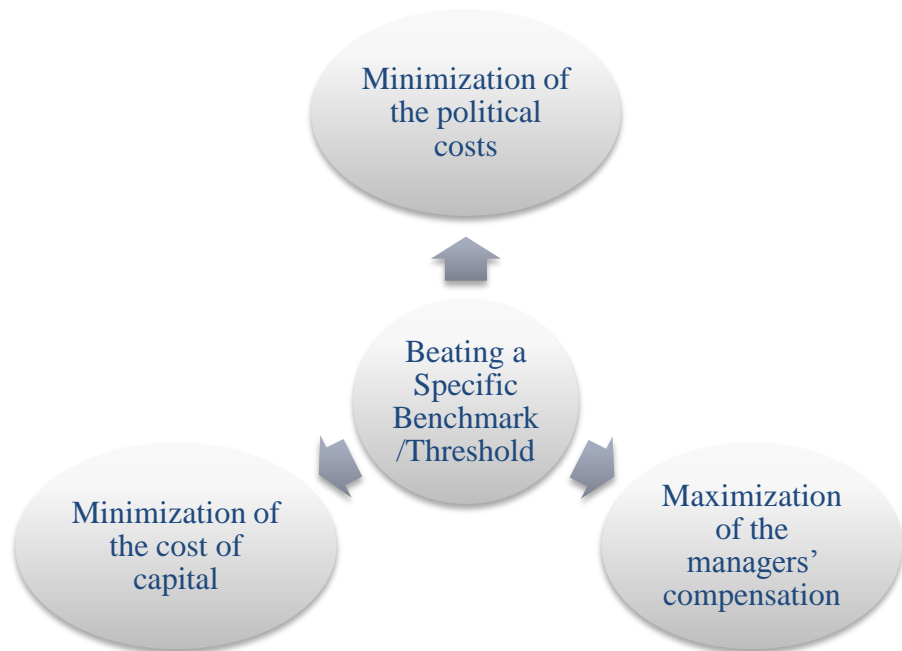
Stolowy et al (2004: 8) suggest a framework on this classification based on the potential wealth transfers between the firm and the society, fund providers, and managers. This framework points out that the intention of the management in EM is formed upon these potential wealth transfers and may be categorized using the distinction of Wattz and Zimmerman (1978) as: 1) Minimization of the political costs; 2) Minimization of the cost of capital; and 3) Maximization of the managers’ compensation.

Minimization of the political costs incentive is based on the wealth transfers between the firm and the society and covers the costs as regulation, environment, tax, and competition. Minimization of the cost of capital incentive is based on the wealth transfers between the firm and the fund providers and comprises capital market incentives as issuing new shares and debt contracts. Stolowy et al (2004: 7) points out that the managers that engage in earnings management activities based on these two incentives are manipulating “for” the firm. However, if the incentive is maximization of the managers’ compensation, the manipulation is “against” the firm.

As Dechow and Skinner (2000: 248) suggest, to beat a specific benchmark/threshold is one of main incentives of EM. Managers opportunistically avoid reporting losses, and earnings decreases to reduce the costs imposed in transactions with stakeholders, assuming that stakeholder decisions are often based on heuristic cutoffs at zero changes or levels of earnings (Burgstahler and Dichev, 1997: 101).

Thus as Figure (2) reflects, the benchmark/threshold incentive is associated with minimizing the costs of the wealth transfers between the firm and the society and fund providers, additionally with the maximization of the managers’ compensation.

Figure 2: Main Incentives of EM



Source: Stolowy et al (2004: 8), Dechow and Skinner (2000: 248), Burgstahler and Dichev (1997: 101)

Theoretical background for the threshold incentive is the Prospect theory (Kahneman and Tversky, 1979: 278) that suggests that the individuals' value functions are concave in gains and convex in losses. Therefore, if zero is a natural reference point for earnings, then managers will manipulate earnings so that the change is positive. Managers care about exceeding three thresholds hierarchically when they report earnings (Figure 3): the most important threshold is loss avoidance that is to report positive profits; if this threshold is reached, then the second one is to sustain recent performance - beat at least last year's earnings; and the third threshold is to meet analysts' expectations and earnings forecasts (Degeorge et al., 1999: 3).

Figure 3: Hierarchy for the Benchmark/Threshold Incentive of Managers



Source: Degeorge et al (1999:3), Dechow and Skinner (2000: 248)

The threshold incentive is an “observable” managerial intent through the graphical evidence on the earnings distributions. Therefore, in light of Schipper (1989), Healy and Wahlen (1999), Dechow and Skinner (2000), and Stolowy et al (2004), this study defines EM as; use of judgment in financial reporting by managers to beat a specific threshold in reported earnings. The definition of EM used in this study may be categorized as “gray EM” according to Ronen and Yaari (2008: 25).

Likewise, Scott (2003: 369) defines EM as “the choice by a manager of accounting policies so as to achieve a specific objective”.

1.2. EARNINGS MANAGEMENT PRACTICES

According to Schipper (1989: 92), managers may engage in EM by using accounting estimates (accrual based EM) or real business activities (real EM) by timing of investment or financing decisions to alter the reported earnings.

There are many ways and forms to manage earnings cited in the literature. The question of how firms manage earnings may be answered in terms of industry-specific (e.g. banking industry), firm-specific (e.g. firm size), and macro economical factors (e.g. financial crises). One of the main forms is “managing earnings towards a threshold” as mentioned in the previous section. The two other key forms of EM practices are earnings smoothing and big bath accounting (Stolowy et al 2004: 9).

1.2.1. Earnings Smoothing

One of the costs associated with the capital markets incentives, attract the attention of accounting research in particular, for the reason that this cost triggered a specific form of managing earnings: “earnings smoothing” that is smoothing the variance of earnings. According to Barth et al. (1999: 412), earnings of firms with continual growth are valued more highly than firms with the same level, therefore firms that report inconsistent earnings are penalized by the stock market. Beidleman (1973, p. 653) defines earnings smoothing as “*the intentional dampening of fluctuations about some level of earnings that is currently considered to be normal for a firm*”.

Based on the definition of EM in section 2.1, earnings smoothing may be income increasing to exceed certain thresholds (e.g. previous period earnings), however may be income decreasing if earnings are above the thresholds.

1.2.2 Big Bath Accounting

This form of EM is based on Prospect Theory as well as “loss avoidance”. Big bath accounting reflects the managerial choices that are concave over gains and convex over losses.

If the firm cannot exceed the thresholds or in cases of large gains exceeding thresholds, managers may inflate the losses for the chances of increasing earnings in next reporting period, assuming that the stakeholders respond to earnings in accordance with the prospect theory (Thaler, 1999: 190).

1.3. EARNINGS MANAGEMENT MEASUREMENT

Measuring EM is a hard task that the accounting research faces since it is based on the unobservable intention of the managers. Researchers use three main approaches to overcome this challenge as total accrual approach, specific accrual approach, and benchmark/threshold approach. However all approaches have pros and cons, therefore choosing the appropriate approach depend on the aim of the research.

1.3.1. Total Accrual Approach

Healy (1985: 86) defines total accruals as the difference of earnings and cash flows from operations. This difference has managed and unmanaged components as:

$$\text{Earnings} = \text{Total Accruals} + \text{Cash Flows from Operations}$$

$$\text{Total Accruals} = \text{Non-discretionary Accruals} + \text{Discretionary Accruals}$$

$$\text{Discretionary Accruals} = \text{Total Accruals} - \text{Non-discretionary Accruals}$$

Alternatively total accruals may be measured by adopting a balance sheet approach. However this approach may be subject to estimation errors when non-operating events occur (Hribar and Collins, 2002: 106).

Total accrual approach generally focuses on identifying the discretionary component of accruals based on the relation between total accruals and hypothesized explanatory factors (McNichols, 2000: 316). In other words, total accrual models estimate normal levels of accruals. Residuals from these models are used as dependent variables as a measure of “abnormal” (discretionary) accruals (Dechow et al., 2009: 39), hence EM. Therefore, this approach de-composes accruals as discretionary/managed and non-discretionary/not managed.

Jones Model (Jones 1991), and the Modified Jones model (Dechow et al., 1995) are the most frequently used models of total accrual approach. In Jones Model, total accruals are regressed on the change in sales and the level of property, plant, and equipment, then the error term stand for the discretionary accruals (Peasnell et al., 2000: 314). Dechow et al. (1995: 199) modify this model assuming that the change in “credit” sales is more frequently manipulated, hence discretionary. These models assume that the non-discretionary accruals are constant over time. The Industry Model (Dechow and Sloan, 1991) relaxes these assumptions, however assumes that the firms in the same industry have common accrual processes.

Total accrual approach is the most frequently used approach in literature to detect EM, while it is the most criticized one. McNichols (2000: 320) reviews the EM literature that uses total accrual approach and provides evidence that the error term in the discretionary accrual proxy is correlated with the partitioning variables in these studies. Dechow et al. (2009: 39) suggest that these correlations raise concerns when the residuals are used to test theories of the determinants or consequences of earnings quality, since performance is an important potential omitted correlated variable. Total accrual approach determines the level of discretionary accruals as a measure of EM, however Kaplan (1985) states that the level of accruals may fluctuate due to the economic conditions, therefore high level of accruals does not necessarily mean higher EM. In other words, this approach measures how the firm’s accrual process differs from other firms and the reason of this difference may be EM, nevertheless it may also be the macro-economic/firm specific conditions.

Peasnell et al. (2000: 318) cautions the research that focuses on bank EM and argue that the financial reporting environments of banks differ from those of industrial firms and their fundamentally different accrual processes are not likely to be captured well by total accrual models.

1.3.2. Specific Accrual Approach

Studies that adopt specific accrual approach focus on industry specific accruals that are likely to be managed for EM. Specific accrual models are the most widely used approach in analyzing bank EM thorough loan loss provisioning (e.g.

Beaver and Engel, 1996). This approach uses the same two stage modeling as total accrual approach that separates the discretionary part of the specific accrual. Therefore, although industry specific, specific accrual approach is also subject to criticisms of the total accrual models as these models may determine the “outliers” of the specific accrual process as EM practices.

Specific accruals are also used to test earnings smoothing. These studies define earnings smoothing as a positive relation between the specific accrual and earnings before the specific accrual (e.g. Ahmet et al., 1999; Anandarajan et al., 2009), therefore test the role of the level of earnings in explaining the level of the specific accrual.

Using specific accrual models is advantageous, if the research focuses on a single industry that the estimations of certain material accruals require substantial judgment and discretion. According to McNichols (2000: 333-335) the pros and cons of using specific accrual models are as follows: These models allow the researcher to analyze the associations between the specific accrual and the explanatory variables directly, however in case of using total accruals models, the results are subject to the caveat that different components of total accruals may relate differently to the explanatory variables. On the other side, this approach requires more industry specific knowledge and sample sizes are smaller, therefore the costs are higher and generalizability of the findings are lower than total accrual models.

1.3.3. Threshold Approach

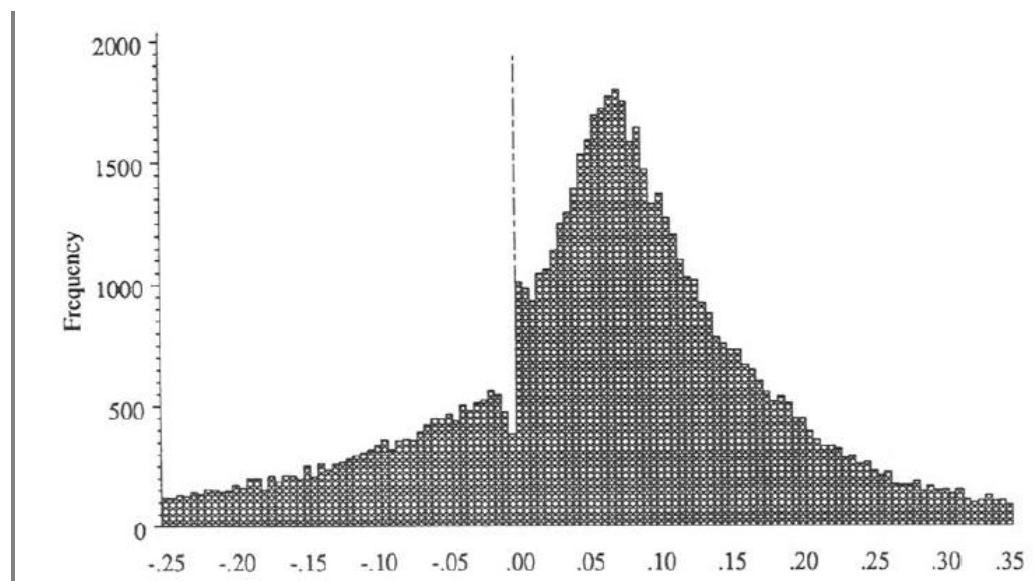
Section 2.1 explains that beating a specific threshold is one of the main incentives of EM. Therefore, this approach uses the graphical distribution of earnings to determine the discontinuities around certain thresholds as an evidence of EM. According to the threshold approach, the observations that “just” beat the thresholds are a proxy of EM. This section provides studies that excluded financial institutions from their sample for the homogeneity of the data.

Most cited representatives of this approach are Hayn (1995), Burgstahler and Dichev (1997), and Degeorge et al. (1999). Hayn (1995) present evidence that firms

whose earnings are expected to fall just below the zero earnings point engage in EM to exceed zero.

Burgstahler and Dichev (1997: 109) examined the graphical distributions of reported “annual net income” of the non-financial firms. Net income is scaled by equity, however they report that scaling by assets does not change the results. Data includes all observations in Compustat database for the period 1976-1994. The histogram presented a single-peaked, bell shaped distribution (Figure 4) that was smooth except in the area near zero showing that the frequencies of reporting small losses are abnormally low, whereas the frequencies of reporting small positive earnings are abnormally high. The rationale underlying this discontinuity is that management prefers to report small positive net income rather than negative net income (Barth et al., 2008: 477).

Figure 4: Histogram of Burgstahler and Dichev (1997) - The Distribution of Annual Net Income



Source: Burgstahler and Dichev (1997: 109)

Besides presenting evidence for the threshold hierarchy, Degeorge et al. (1999: 18) also suggest a bin width calculation for constructing the histograms to balance the need for a precise density estimate with the need for fine resolution. The

formula was based on Silverman (1986) and Scott (1992)'s recommendation to calculate the bin width positively related to the variability of the data and negatively related to the number of observations. Degeorge et al. (1999: 18) suggest that the bin widths may be calculated as the twice the interquartile range of the variable multiplied by the negative cube root of the sample as shown in equation (1) that is widely used in threshold driven methodology (e.g. Beatty and Petroni 2002, Xue 2003, Eldengurg 2011, Givoly 2009, Lee 2009).

$$(eq. 1) \quad \text{Bin width: } 2 \text{ (IQR) } n^{-1/3}$$

Where;

IQR = Sample interquartile range

n = the number of available observations.

Threshold approach has pros and cons as well as the total and specific accrual approaches. This approach allows the researcher to detect EM without estimating the discretionary accruals. McNichols (2000: 336) state that the power of the threshold approach designs is that it groups the firms that manage earnings and also state that this methodology will contribute foremost to the EM literature.

However, Dechow et al. (2003: 356) report that small profit and small loss firms have similar levels of discretionary accruals and both groups have similar proportions of positive discretionary accrual firms, thus argue that the “kink” (discontinuity) in the histograms may not be indicating EM. Ayers et al (2006: 618) argue that the positive associations of the discretionary accruals and the likelihood of beating an earnings threshold may also hold for the other adjacent bins/throughout the earnings distributions due to the systematic association between the discretionary accrual proxies and performance. To overcome this problem, Ayers et al (2006: 618) suggest that if the positive association does not hold for the other intervals of the histogram, and if the association intensifies closer to the threshold, then the findings may be interpreted as an evidence of EM.

Additionally, Durtschi and Easton (2005: 18) suggest that scaling issues could be responsible for the finding of discontinuities at zero in Burgstahler and Dichev (1997). In response to Durtschi and Easton (2005), Jacob and Jorgensen

(2006: 370) present evidence for a discontinuity at zero in the distribution of un-scaled net income, pre-tax income, and earnings per share and conclude that EM “is” responsible for the discontinuities.

The threshold driven methodology of Hayn (1995), Burgstahler and Dichev (1997), and Degeorge et al. (1999) to detect EM, is widely used by numerous researchers as Beatty et al. (2002), Phillips et al. (2003), Leuz et al (2003), Jeanjean and Stolowy (2008) and Roychowdhury (2006).

1.4. MORE EMPIRICAL EVIDENCE ON THRESHOLD-DRIVEN EARNINGS MANAGEMENT IN NON-FINANCIAL FIRMS

Phillips et al. (2003: 513) examine the positive association between discretionary accruals/accounting choices and the likelihood of beating an earnings threshold and find that deferred tax expense and avoiding losses are significantly associated.

Leuz et al (2003: 506) provides evidence of EM differences across 31 countries and use Burgstahler and Dichev (1997), and Degeorge et al. (1999) to detect loss aversion. They use the ratio of small profits to small losses, using reported net income scaled by total assets. Leuz et al (2003: 513) found that European and Asian firms exhibit a higher degree of EM measured by loss avoidance than Anglo-American firms.

Bhattacharya et al. (2003: 10-11) examine the firms’ earnings opacity of 34 countries for the period of 1985-1998, and use loss aversion as a measure of opacity. Following Burgstahler and Dichev (1999), they use the histograms of earnings distributions and measure loss aversion of a country as:

$$\text{Loss Aversion} = (\text{SP} - \text{SL}) / \text{SP} + \text{SL}$$

Where;

SP = Number of firms that report small positive earnings

SL = Number of firms that report small negative earnings

Roychowdhury (2006: 10) detect manipulation of real activities to meet earnings targets, and use Burgstahler and Dichev (1997) methodology to determine the “suspect firm years” as these observations indicate reporting small profits as a measure of EM. Roychowdhury (2006: 15) generates a dummy variable indicating the suspect firm years. This dummy variable is used as an exploratory variable in regressions explaining the level of cash flows and discretionary expenses. The negative coefficient of the dummy variable is interpreted as firms carry out activities that lead to lower cash flows and reduce discretionary expenses to beat the zero threshold.

Jeanjean and Stolowy (2008) used the methodology of Burgstahler and Dichev (1997), and Degeorge et al. (1999) to investigate the impact of IFRS adoption on EM in three countries. To measure EM, the ratio of the frequency of small profits to small losses are computed that shows the extent to which insiders manage earnings to avoid reporting losses (Leuz et al., 2003). Then the odds ratios for small profits to small losses ratio are estimated using the Stata software’s “tabodds” command that tabulates the odds of failure against a categorical explanatory variable (Post-IFRS observations) and applies a test for the linear trend of the log odds against the numerical code used for the categories of IFRS adoption period. This test shows whether the change in the odds (decrease or increase) is significant with increasing application of IFRS.

Barth et al. (2008) examines the effects of adopting IFRS on EM, and uses an indicator variable that equals one if net income scaled by total assets is between 0 and 0.01. Barth (2008: 484) found a negative coefficient this dummy variable indicating that non-IFRS firms manage earnings toward small positive amounts more frequently than firms that adopted IFRS.

1.5. DO BANKS HAVE MORE INCENTIVES TO MANAGE EARNINGS?

Macey and O’Hara (2003: 97-98) state that what distinguishes banks from other firms is their capital structure, liquidity production function, moral hazard problems, the conflict between fixed claimants and shareholders, and the asset

structure with loyalty problems that may all serve as additional incentives of EM from the contractual incentives point of view. Considering the multiplier effect that banking activities have on the rest of the economy, Macey and O'Hara (2003) additionally express that regulation is necessary for banking industry. Thus banks are highly regulated firms that face regulatory monitoring and constraints explicitly tied to accounting data (e.g. capital adequacy constraints, regulations on loan loss provisions) (Healy and Wahlen, 1999). Banks may engage in EM practices to avoid violating regulations (Shen and Chih, 2005: 2678). Accounting research provides strong evidence on the positive relationship of EM and regulatory constraints, specifically for banking industry (e.g. Collins et al., 1995; Beatty et al., 1995; Anandarajan et al., 2007; Biurrun, 2010).

Burgstahler and Dichev (1997: 101) suggest that, for financial institutions, incentives to manage earnings through avoiding losses may be linked to regulatory oversight. Fonseca and Gonzalez (2008: 22) found evidence that the regulatory framework explains cross-country differences for bank EM.

Shen and Chih (2005: 2678) point out that banks have stronger incentives to avoid reporting losses in order to keep depositors from losing confidence. Accordingly, Bornemann (2010: 5) signify that reporting losses may lead doubts about the economic soundness of banks within the society. Stolowy et al. (2004)'s framework for EM incentives may also explain why reporting positive profits is crucial specifically for the banking industry, since wealth transfers between the banks and the society differs from the other industries as Morgan (2002: 874) explains:

“Why do we regulate and protect banks? Why not leave it to the savers and investors who put their money in banks? The regulators' rationale goes something like this: Banks are black boxes. Money goes in, and money goes out, but the risks taken in the process of intermediation are hard to observe from outside the bank. Absent the steady hand of government (deposit and payments insurance, lender of last resort, supervision and regulation of bank risk-taking) the opacity of banks exposes the entire financial system to bank runs, contagion, and other strains of "systemic" risk.” Morgan (2002: 874).

One of the major differences between the other industries and banks is the possibility of the “contagion effect” that the economy faces, following a failed bank as Morgan (2002: 874) points out. In other words, failure of one bank may serve as an infectious disease in banking sector through the contagion effect. Morgan (2002: 874) reveals the significance of bank EM by determining “opacity” as a possible reason for contagion and financial crisis. The risk of a financial crisis and its’ consequences boost the wealth transfers between the banks and the society; hence the incentives for EM, since crises would cause lost jobs and wasted resources.

1.6. MEASURING THRESHOLD-DRIVEN EARNINGS MANAGEMENT IN BANKING INDUSTRY

Beatty et al (2002: 550-551) analyze EM to exceed “sustain recent performance” threshold for US banks by applying the methodology of Burgstahler and Dichev (1997), and Degeorge et al. (1999). To construct the histograms of the earnings changes, they use the change in return on assets (ΔROA) calculated as the current year's net income less the previous year's net income, divided by total assets at the beginning of the previous year and apply the bin width formula of Degeorge et al. (1999: 18). The interval sizes are determined as the twice the bin width used in the histograms of ΔROA , because of the trade-off between sample size and observable EM amounts. The histograms of banking firms are showed a different earnings distribution than non-financial firms. Instead of a single-peaked, bell shaped distribution, histograms presented less frequent observations on the of zero reference point. In addition to the graphical evidence, they apply a probit analysis to control for the bank-specific factors to face the criticisms that the “kink” in the histograms may not be attributable to EM. The probit model developed by Beatty et al (2002: 551) is as follows:

$$\Delta ROAPOS = \alpha_r + \beta_1 (PUBLIC)_{it} + \beta_2 (LNASSET)_{it} + \beta_3 (\Delta ASSET)_{it} + \beta_4 (ACFO)_{it} + \beta_5 (Loan\ Characteristics)_{it} + \varepsilon_{it}$$

Where;

$\Delta ROAPOS$ = dummy variable, taking the value 1 if the bank has ΔROA in the interval between 0 (exclusive) and 0.0008 (inclusive), and 0 otherwise;

$PUBLIC$ = dummy variable, taking the value 1 if the bank is publicly held, and 0 otherwise;

$\Delta ASSET$ = first difference in total assets, divided by total assets at the end of the previous year;

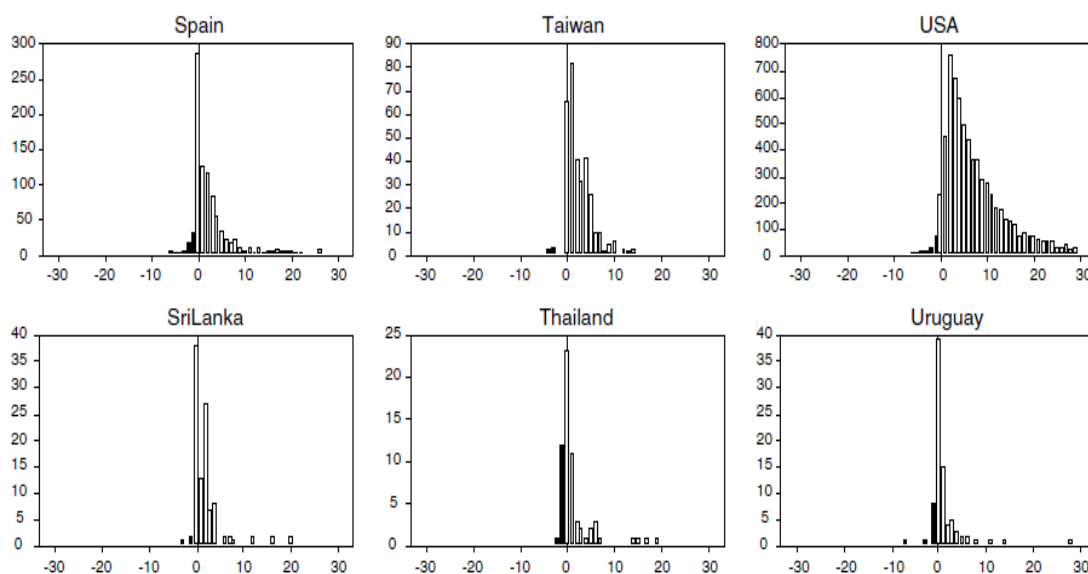
$LNASSET$ = natural log of total assets;

ΔCFO = first difference in cash flows, divided by total assets at the end of the previous year,

Beatty et al (2002: 567) find a significantly positive coefficient for the $PUBLIC$ variable, report that listed banks report more small increases and fewer small decreases in earnings than private banks, even after controlling for differences in the operations of listed vs. private banks, measured by bank size, asset growth, cash flows, and loan characteristics.

Shen and Chih (2005: 2675) provide international evidence of EM to exceed zero threshold from commercial banks in 48 countries using the methodology of Burgstahler and Dichev (1997). Consistent with Beatty et al (2002) the international sample also showed a difference in histograms of banks. The banks earnings distributions did not show a single-peaked, bell shaped distribution, yet half bell-shaped distribution (Figure 5). Figure 5 demonstrates the graphical differences of earnings distributions of banks, indicating that loss reporting is less common in banking industry.

Figure 5: The Graphical Differences of Earnings Distributions Banks



Source: Shen and Chih (2005: 2683). Annual net income scaled by year-end common equity for US banks for the sample period from 1993 to 1999.

Shen and Chih (2005: 2684) use three EM measures to explore the differences of EM to exceed zero threshold across countries following Burgstahler and Dichev (1997), Degeorge (1999) and Leuz et al (2003). They find that EM exists in two third of the sample, GDP per capita decreases the degree of EM and stronger law enforcement result in stronger EM measured by loss aversion, specifically in low income countries. Shen and Chih (2005: 2696-2697) conclude that strengthening investor protection in low income countries may encourage EM in the banking industry.

Altamuro and Beatty (2010: 59) analyze the impact of regulation on financial reporting quality of depository institutions in the US. As EM measure they follow the probit analysis of Beatty et al (2002). In addition to the probit model of Beatty et al (2002), Altamuro and Beatty (2010: 64) generate dummy variables indicating the regulation years, then use interaction variables in the model. They interpreted the negative significant coefficients of the interaction variables as internal controls regulation resulted in less benchmark-beating.

Bornemann and Kick (2010) and Feng and Mei (2010) focus on single countries. Bornemann and Kick (2010) presents evidence from German banks and

Feng and Mei (2010) from Chinese banks that commercial banks in Germany and China manage reported earnings through making small negative earnings into small positive earnings.

1.7. MAIN EARNINGS MANAGEMENT TOOLS OF BANKS

Although managers may engage in EM via variety of tools, research determines two major tools that bank managers use to manage earnings. Banks engage EM mainly by the strategic timing of realized gains and losses and/or altering loan loss provisions (LLP).

1.7.1. Timing of Realized Gains and Losses-Available for Sale Securities

Prior the application of Statement of Financial Accounting Standards (SFAS) 115 for financial assets, available for sale (AFS) category was not revealed in generally accepted accounting principles (GAAP) in the US. US based research (Clinch and Magliolo, 1993; Collins et al., 1993) provided evidence that banks time the asset sales for the purpose of managing earnings.

Beatty et al (1995: 232) found that timing the recognition of miscellaneous gains is associated with the level of LLP, thus predicted that fair value accounting (FVA) for investment securities could increase bank EM thorough the increased use of LLP and other assets that are not marked to market. Beatty (1995: 38) caution FASB that SFAS 115 may enhance bank EM for the reason that it reduces the restrictions on sales of securities classified as AFS.

Beatty et al (2002: 548) analyze the differences in EM practices of publicly held and private banks in terms of managing towards the “sustain recent performance” threshold, timing of realized gains and losses, and discretionary LLP. Beatty et al (2002: 548) suggest that threshold driven EM and timing realized gains and losses of investment securities are associated in banks and examine whether bank managers avoid a small decline in earnings by realizing more security gains or fewer security losses. Beatty et al (2002: 553) apply the following model to estimate the non-discretionary component of the realized security gains and losses:

$$RSGL_{it} = \alpha_1 + \beta_1 LNASSET_{it} + \beta_2 UNGL_{it} + \varepsilon_{it}$$

where:

RSGL = realized security gains and losses as a percentage of total assets

UNGL = unrealized security gains and losses at the beginning of the year as a percentage of total assets

Then the residuals of the model are estimated as the “discretionary” component. Beatty et al (2002: 562) find that discretionary security gains and losses are more associated with EM to exceed thresholds for publicly held banks relative to the private banks.

Consistent with Beatty et al (2002), Barth et al (2011) presents more recent evidence and found that U.S. banks use AFS securities to manage earnings by selling AFS securities with unrealized gains and holding on to AFS securities with unrealized losses. Shrieves and Dahl (2003: 1235) presents evidence for the positive relationship between the discretionary component of security gains and losses and EM for the Japanese banking system.

Zhang and Mei (2010: 5235) present evidence from Chinese banks, also refer to the new developments in Chinese financial reporting environment for banks as: under the prior local accounting standards, banks’ short term investment consisted of government bonds and policy bonds, thus all short-term investment can be used to manage earnings. Investment securities are divided into two categories such as fair value through profit or loss and “AFS” under the New Accounting Standards on February 15, 2006. Zhang and Mei (2010: 5235) found that holding more AFS securities is associated with more EM measured by total accruals, thus the scope of earnings management on investment of Chinese banks had been narrowed to AFS financial assets.

1.7.2. Loan Loss Provisions

1.7.2.1. Bank Loan Loss Accounting

Loan loss allowance is a contra-asset account in the balance sheet of the banks that reflect the total amount of anticipated future loan losses. Loan loss allowances reduce the loans account as it is disclosed in the assets side of the balance sheet as a negative amount (Ashour, 2011: 2).

LLP are accrued “expenses” in banks that reflect the estimates of changes in anticipated future loan losses due to credit risk (Molenaar, 2009: 5). Banks use LLP as reserves to cover the expected losses embedded in their loan portfolios (Perez et al., 2006: 9). LLP reduce the loans account in the balance sheet by increasing loan loss allowances contra-account. LLP are large accrual for banks, thus have a substantial impact on bank income statements. Additionally, the estimation of “anticipated” future losses is discretionary and may be estimated by adopting incurred loss approach or expected loss approach.

IFRS refers loan loss allowance as “impairment allowance” and IAS 39 adopts “incurred loss approach” for the estimation of the loan impairments. The incurred loss approach in IFRS requires an “objective evidence” of the impairment and the event that caused the evidence should occur after the initial recognition (IAS 39, paragraph 59) and accounting treatment is as follows:

If there is objective evidence that an impairment loss on loans and receivables has been incurred, the amount of the loss is measured as the difference between the assets' carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced either directly or through use of an allowance account. The amount of the loss is recognized in profit or loss. If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized (such as an improvement in the debtor's credit rating), the previously recognized

impairment loss can be reversed either directly or by adjusting an allowance account (IAS 39, paragraphs 63 and 69).

Therefore IAS 39 requires that only losses from events identifiable at the balance sheet date may be included as an impairment loss. Losses from future events as an expected closedown of a factory or expected rating downgrades may not be included, however incurred loss approach has been criticized recently for not reflecting the true credit risk in loan portfolios and loss recognition is delayed specifically in economical downturns (Gebhart and Farkas, 2010: 5). Contrarily, expected loss approach includes the losses from future events so that these losses are recognized timely, yet increases the use of manager's judgment and discretion.

Due to the criticisms, the increased recently on November 2009, the IASB issued an Exposure Draft "Financial Instruments: Amortized Cost and Impairment" that relaxes the incurred loss approach towards an expected loss approach (IASB, 2009: 6).

1.7.2.2 Empirical Evidence on the Discretionary Use of Loan Loss Provisions

Accounting research provides substantial evidence on the discretionary use of LLP. This section provides a brief overview of the literature in this context.

Collins et al (1995), Ahmet et al (1999), Anandarajan (2007), Fonseca and Goncalvez (2007) among others, measure EM by examining the relation between earnings and loan loss provisions and define the nondiscretionary component of earnings as earnings before discretionary accruals/choices.

Collins et al. (1995: 279) estimate nondiscretionary earnings as earnings before taxes, realized gains and losses and LLP, both scaled by year end gross total assets and find that earnings before taxes, realized gains and losses and LLP has a positive significant relationship with LLP consistent with smoothing earnings via LLP for US banks during 1989-1991.

Ahmed et al. (1999: 15) estimate nondiscretionary earnings as earnings before taxes and loan loss provisions scaled by average total assets and did not find a

positive relationship with LLP. Ahmed et al. (1999) concluded that EM is not an important element of LLP.

Anandarajan et al. (2007: 366) follows the methodology of Collins et al (1995) and Ahmet et al (1999), and presents evidence from Australian banking system. Anandarajan et al (2007: 366) analyzes the effect of Basel regime and public ownership on EM and capital management of Australian banks. They apply the following model (summarized) in their analysis:

$$LLP_{it} \text{ (or LLPR)} = \alpha_{it} + \beta_1 EBT_{it} + \beta_2 (\text{Controls} + \text{Capital Management Explanatory Variables})_{it} + \beta_3 LISTED_{it} + \beta_4 POST_{it} + \beta_5 LISTED * EBT_{it} + \beta_6 EBT_{it} * POST + \beta_7 LISTED * POST EBT_{it} + \varepsilon_{it}$$

where:

LLP = natural logarithm of LLPs;

LLPR = ratio of LLPs to average loans outstanding;

EBT = ratio of earnings before taxes and LLPs to end of year total assets;

LISTED = dummy variable (1 if listed commercial bank, and 0 if unlisted commercial bank);

POST = dummy variable (1 for post-Basel regime years 1996– 2001, and 0 for pre-Basel regime years 1991–1995);

*LISTED*EBT* = interaction of commercial bank type *EBT*;

*EBT*POST* = interaction of *EBT* with type of regime;

*LISTED*EBT*POST* = interaction of type of bank *EBT* and type of regime.

Anandarajan et al (2007: 373) found a significant positive coefficient for *EBT* as the evidence of earnings management behavior using LLPs by Australian banks, and this relationship is more significant relative to unlisted banks, and in the post-basel period relative to the pre-Basel period.

Beatty et al. (2002: 553) apply the following model to estimate the non-discretionary component of LLP:

$$\begin{aligned}
LLP_{it} = & \alpha_{it} + \beta_1 LNASSET_{it} + \beta_2 \Delta NPL_{it} + \beta_3 LLR_{it} + \beta_4 LOANR_{it} + \\
& \beta_5 LOANC_{it} + \beta_6 LOAND_{it} + \beta_7 LOANA_{it} + \beta_8 LOANI_{it} + \\
& \beta_9 LOANF_{it} + \varepsilon_{it}
\end{aligned}$$

where:

LLP = loan loss provision as a percentage of the average of beginning and ending total loans;

ΔNPL = change in nonperforming loans as a percentage of the average of beginning and ending total loans;

LLR = loan loss reserve as a percentage of total loans at the beginning of the year;

LOANR = loans secured by real estate as a percentage of total loans;

LOANC = commercial and industrial loans as a percentage of total loans;

LOAND = loans to depository institutions as a percentage of total loans;

LOANA = loans to finance agricultural production as a percentage of total loans;

LOANI = loans to individuals as a percentage of total loans;

LOANF = loans to foreign governments as a percentage of total loans.

Then the residuals of the model are estimated as the “discretionary” component. Beatty et al (2002: 568) find that private banks are less disposed to use discretion in LLP to sustain recent performance.

Perez et al (2006: 23) examined the Spanish banking industry and found that Spanish banks use LLP to manage earnings, not capital.

Fonseca and Gonzales (2008: 217) analyzed the use of discretion in LLP of 41 countries during 1995-2002. According to their findings, income smoothing with LLP vary across countries due to the institutional and regulatory differences; financial structure, and development. Fonseca and Gonzales (2008: 225) found a positive relationship of EM and market-orientation and the development of the financial system, whereas a negative relationship of EM with regulatory restrictions. These findings reveal that earnings smoothing through LLP increases in countries with more developed financial systems.

Another cross-country study is Curcio and Hasan (2008: 3) that followed the methodology of Collins et al (1995), Ahmet et al (1999), and Anandarajan (2007) examined EM practices of European banks for the period of 1996-2006. Curcio and Hasan (2008: 35) report that EM is an important factor that affects LLP decisions for both EU and non-EU banks; and regulatory restrictions reduce earnings smoothing incentives in non-EU banking systems.

Leventis et al. (2010: 103) presents recent evidence from 91 listed European commercial banks. They focus on the impact of IFRS adoption on the EM practices of banks and applied the model of Anandarajan et al (2007). Leventis et al (2010: 112) generated a dummy variable reflecting the years that IFRS was adopted. Then created an interaction variable with ratio of earnings before taxes and LLPs to total assets (EBIT) as $IFRS * EBIT$. Next they examined the impact of the interaction of variable on the relationship of LLP and ratio of earnings before taxes and LLPs to total assets. Leventis et al (2010: 119) conclude that the adoption of IFRS and incurred loss model of IAS 39 mitigated EM practices using LLP, hence improved earnings quality of European banks.

In summary, this chapter reveals that detecting EM is a challenging task and researchers use three main approaches to overcome this difficulty. Although there are studies that attempt to detect bank EM using total accrual models, literature suggests using threshold and specific accrual approaches for measuring bank EM based on the fundamentally different financial reporting environments and accrual processes.

One important aspect of this chapter is the “warnings” of the literature regarding the criticisms of the approaches that measure EM. The chosen approach to detect EM, should be appropriate for the aim of the study and should consider and respond to the criticisms that literature points out.

This chapter signifies the role of managerial incentives in EM practices and that the banks have more incentives to manage earnings based on their crucial role in the economy. Research also indicates the significance of thresholds, particularly zero threshold as one of main incentives to manage earnings in banking industry.

Therefore the elimination of one opportunity as AFS category cannot abolish the incentive since these incentives are particularly based on the increased wealth transfers between the society, regulators, and the banks. And if the incentive remains,

then the bank managers will find other ways to beat the thresholds. Thus it is important to explore what constraints EM practices.

Literature suggests that banks mainly use AFS of IAS 39 and/or altering loan loss provisions to manage earnings. The following chapter analyzes fair value accounting for financial assets and demonstrates the difference of AFS category relative to the other asset categories of IAS 39.

CHAPTER TWO
FAIR VALUE ACCOUNTING
FOR FINANCIAL ASSETS

The US Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) have moved towards a market based fair value accounting regime in 1980s, concurrently with the Savings and Loans Crisis in US that revealed the failure of the historical cost measurement. Historical cost measurement has proven its inadequateness in Savings and Loans Crises (Michael, 2004: 120) and Japanese banking crisis in 1990s by hiding the insolvency of many financial institutions due to the delayed recognition of losses.

The systematic replacement of historical cost regime to fair value accounting represents the shift towards a decision usefulness paradigm (Hitz, 2007: 327).

The aim of fair value measurement is to fully reflect the asset or liability's value under the current economic conditions that the transaction takes place, hence to provide relevant information regarding the financial situation of firms (Landsman 2007, Boyer 2007).

One of the aims of this study is to examine earnings management through AFS securities. Therefore it is important to examine the pros and cons of fair value measurement, and the effects of the financial asset classification measured at fair value on net income, specifically available for sale category. This chapter presents a review of the literature on fair value measurement.

This chapter proceeds as follows. Section two defines fair value and fair value accounting under IAS 39. Sections three and four display the categories of asset classification and its effects on net income. Section five provides a literature review on the main critical aspects of fair value accounting. Section six refers to the contemporary developments in standard setting in regard to fair value measurement and section seven summarizes the literature.

2.1. FAIR VALUE ACCOUNTING UNDER IAS 39

FASB and IASB define fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between knowledgeable market participants at the measurement date (Barth and Landsman, 2010: 403).

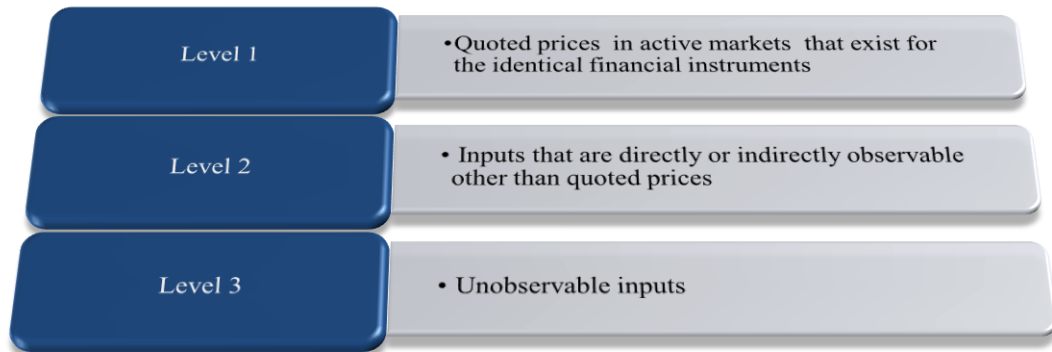
IAS 39: Financial Instruments: Recognition and Measurement, sets the principles for recognizing and measuring financial assets and liabilities. Definition of “fair value” in IAS 39 (paragraph 9) is *“the amount for which an asset could be exchanged or a liability settled, between knowledgeable, willing parties in arms length transaction”*.

According to this definition, the value that best represents “fair value” is the “market price”. Where active markets are available, fair value may easily be determined, yet since there are circumstances that the market values cannot be observed, IAS 39 presents a hierarchy for the determination of fair values for financial instruments: (IAS 39 Appendix A, paragraphs AG69-82)

- *Quoted market prices in an active market are the best evidence of fair value and should be used, where they exist, to measure the financial instrument.*
- *If a market for a financial instrument is not active, an entity establishes fair value by using a valuation technique that makes maximum use of market inputs and includes recent arm's length market transactions, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis, and option pricing models. An acceptable valuation technique incorporates all factors that market participants would consider in setting a price and is consistent with accepted economic methodologies for pricing financial instruments.*
- *If there is no active market for an equity instrument and the range of reasonable fair values is significant and these estimates cannot be made reliably, then an entity must measure the equity instrument at cost less impairment.*

IFRS 7: “Financial instruments: Disclosures” state that firms should classify and disclose fair value measurements using the ‘fair value hierarchy’ that reflects the significance of the inputs used in making the measurements as Figure 6:

Figure 6: Disclosure of Fair Value Hierarchy based on IFRS 7



Source: IFRS 7, paragraph 27A

Fair values may be used in initial or subsequent measurement, however fair value accounting (FVA) applies when fair values are used for initial and also for subsequent measurement of financial statement items and changes in fair value are recognized in net income (Barth and Taylor, 2009: 27). For the initial measurement, fair value is the cost of the item, however for the subsequent measurement, re-measurement and recognition of the fair value changes in net income is necessary for each reporting date.

2.2. CLASSIFICATION OF FINANCIAL ASSETS BASED ON IAS 39

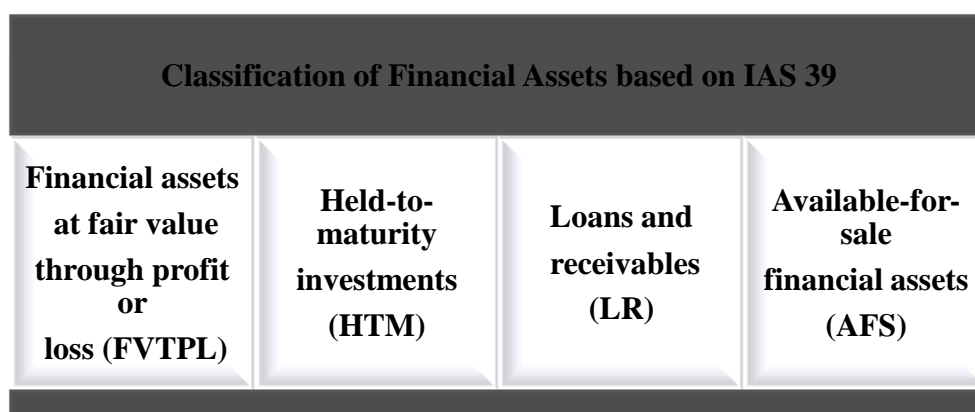
According to IAS 39, the recognition and measurement differ due to the classification of the financial assets after the initial recognition. Although all financial assets are initially measured at fair value, subsequent measurement and the accounting treatment for gains and losses depend on the classification. Financial assets must be classified into one of the four categories depending essentially on the holding intention of the management (Figure 7). The category “fair value through profit or loss (FVTPL)” includes financial assets that are held for trading that the

management intends to sell in the short term, all derivatives except hedging instruments, and other financial assets that designated to be measured at FVTPL.

If the management has a positive intention to hold the financial assets with fixed or determinable payments until maturity, then they are classified as “Held to Maturity (HTM)”. Non-derivative financial assets with fixed or determinable payments that are not quoted in an active market are classified into the “Loans and Receivables (LR)” category.

Any other non-derivative financial assets that are not classified as FVTPL, HTM or LR are categorized as AFS. Management’s intention is not clearly determined for the AFS category.

Figure 7: Categories of Asset Classification- IAS 39



Source: IAS 39, Para. 9.

The accounting treatment for financial assets under IAS 39 is based on two different measurement bases that are fair value and amortized cost. HTM and LR category are measured at amortized cost. Although both measured at fair value, AFS financial assets are differs from FVTPL category and measured at fair value thorough other comprehensive income (FVTOCI) except for impairment and foreign exchange gains and losses. FVA fully applies for FVTPL category, as realized or unrealized changes in fair value are recognized in profit or loss (Table 1).

Table 1: Accounting Treatment of Financial Assets Measured at Fair Value

| Accounting Treatment | FVTPL | AFS |
|--------------------------------|------------------|------------------|
| Initial Measurement | Cost-Fair Value | Cost-Fair Value |
| Subsequent Measurement | Fair Value | Fair Value |
| Realized Gains/Losses | Income Statement | Income Statement |
| Unrealized Gains/Losses | Income Statement | Equity |

Source: IAS 39, Paragraph 55.

2.3 EFFECTS OF THE FINANCIAL ASSET CLASSIFICATION MEASURED AT FAIR VALUE ON NET INCOME

For financial assets measured at FVTPL, realized and unrealized gains and losses are included into the income statement and influence the income statement of the current period. For AFS assets measured at FVTOCI, unrealized gains and losses are recorded as they occur in accumulated other comprehensive income, a component of owners' equity, not in net income (Ryan, 2008: 4), and do not affect net income until they are realized, sold, or impaired. The following example and Table (2) demonstrates the influence of the financial asset classification measured at fair value on net income.

**“X” Firm Example on the Effects of the Financial Asset Classification
Measured at Fair Value on Net Income**

Firm “X” acquires 10,000 shares of firm “Y” on 03/10/2011. The transaction took place in Istanbul Stock Exchange from the price of 10.5 TL.

Scenario 1: On 31.12.2011 the exit (selling) price of the shares of firm “Y” is 11.5 TL. Firm “X” decides to sell the securities on 04.02.2012 and the price is 12.0 TL.

Scenario 2: On 31.12.2011 the exit price of the shares of firm “Y” is 10.0 TL. Firm “X” decides to sell the securities on 04.02.2012 and the price is 9.5 TL.

Scenario 3: On 31.12.2011 the exit price of the shares of firm “Y” is 10.0 TL. Firm “X” decides to sell the securities on 04.02.2012 and the price is 12.0 TL.

Scenario 4: On 31.12.2011 the exit price of the shares of firm “Y” is 11.0 TL. Firm “X” decides to sell the securities on 04.02.2012 and the price is 10.0 TL.

Table 2: The influence of the financial asset classification measured at fair value on net income

| Scenario | Date | Price | Total Price | Gains and losses | FVTPL | | AFS |
|----------|------------|-------|-------------|------------------|------------------|------------------|----------------------------|
| | | | | | Income Statement | Income Statement | Equity-Revaluation Reserve |
| 0 | 03.10.2011 | 10.5 | 105000 | ---- | ---- | ---- | ---- |
| 1 | 31.12.2011 | 11.5 | 115000 | +10000 | +10000 | ---- | +10000 |
| 1 | 04.02.2012 | 12.0 | 120000 | +5000 | +5000 | +15000 | ---- |
| 2 | 31.12.2011 | 10.0 | 100000 | -5000 | -5000 | ---- | -5000 |
| 2 | 04.02.2012 | 9.5 | 95000 | -5000 | -5000 | -10000 | ---- |
| 3 | 31.12.2011 | 10.0 | 100000 | -5000 | -5000 | ---- | -5000 |
| 3 | 04.02.2012 | 12.0 | 120000 | +20000 | +20000 | +15000 | ---- |
| 4 | 31.12.2011 | 11.0 | 110000 | +5000 | +5000 | ----- | +5000 |
| 4 | 04.02.2012 | 10.0 | 100000 | -10000 | -10000 | -5000 | ---- |

According to Table (2), in all of the four scenarios, the recognition of gains and losses in net income differs due to the classification. If the security is classified as AFS, the cumulative unrealized gains and losses in other comprehensive income are transferred to net income upon realization.

It is important to note that the unrealized gains and losses are reported in the statement of comprehensive income, therefore investors may also use this information as it is disclosed. However, research provides substantial evidence that the comprehensive income is less value relevant than net income (Cheng et al., 1999; Cohen et al., 2000; Brimble and Hodgson, 2005).

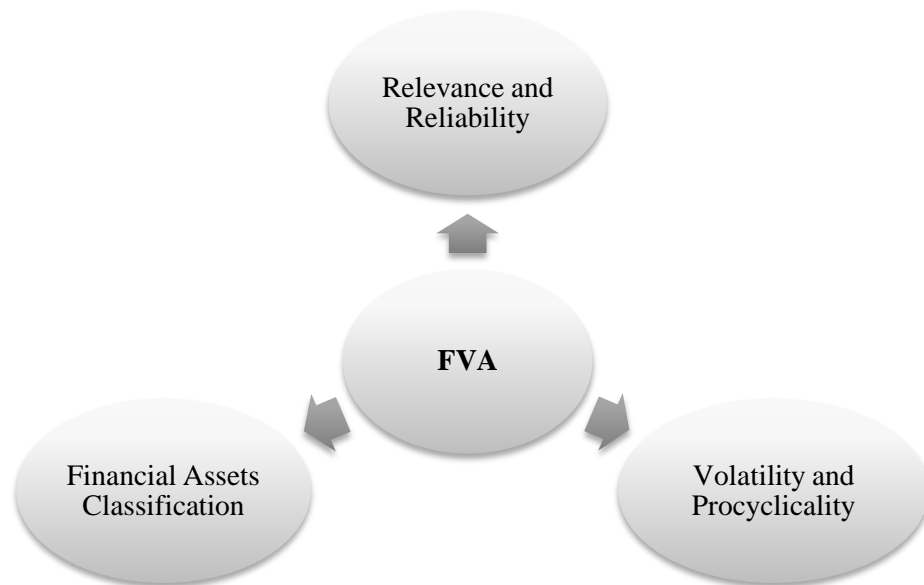
2.4. LITERATURE REVIEW ON THE CRITICAL ASPECTS OF FVA

IASB concluded that fair value meets the conceptual framework better than other measurement bases considered, focusing on which measurement basis best meets the objective of financial reporting, the elements definitions, and the qualitative characteristics of accounting information (Barth, 2006: 7).

Laux and Leuz (2009: 828) imply that “*Setting accounting standards always involves tradeoffs, and any accounting regime will have costs and benefits* (Laux and Leuz 2009, p.828)”.

Accordingly, fair value measurement and FVA has been widely criticized by academic researchers recently. Much of the critics of FVA focus on the subsequent measurement at fair value on the grounds of relevance and reliability (Barth and Taylor 2009: 27). Additionally, FVA and FVA rules have been blamed for contributing the volatility, procyclicality, and EM through financial asset classification, specifically for banking industry (Figure 8).

Figure 8: Main Critical Aspects of FVA



2.4.1. Relevance and Reliability

Fair value measurement is relevant if it is capable of making a difference to financial statement users' decisions, and reliable if the reported fair value represents what it is purported to represent (Barth et al., 2001a: 80). Proponents of FVA signify that historical costs financial statements are not relevant because they do not provide information about current values. Fair values reflect current market conditions, thus provide timely information for investors. Opponents however, argue that fair value is not relevant and that prices could be distorted by market inefficiencies, investor irrationality or liquidity problems; and if no active market exists for the security, fair values based on valuation models are not reliable since these valuations are not based on arms length transactions (Laux and Leuz, 2009; Fiji et al., 2011).

Value relevance research examines how well reported accounting figures reflect information used by equity investors (Barlev and Haddad, 2003: 393). Landsman (2007: 19-30) provides a detailed review of the value relevance research on the usefulness of FVA information to investors based on US and international evidence. Landsman (2007: 28) points out that the majority of the value relevance

research that focus on the relevance and reliability of fair value information analyzes banking industry, since banks are largely comprised of financial assets that are measured at fair value and concludes that disclosed and recognized fair values are informative to investors, however the level of informativeness is affected by the amount of measurement error and source of the estimates. Barth and Landsman (2010: 04) update the review and point out that:

“Taken together, the fair value literature, including the studies that focus on banks, provides rather substantial evidence that recognized and disclosed fair values are relevant to investors and reliable enough to be reflected in share prices”(Barth and Landsman, 2010: 404).

However, regarding to the reliability issues, research on the discretion afforded by FVA and FVA rules provides mixed results. Research indicates that managers take advantage of the increased discretion afforded by FVA, therefore historical cost based valuations is more reliable (Emerson et al. 2010; Flegm, 2005). Specifically the measurement of Level three is questionable in terms of relevance and reliability trade off.

2.4.2. Volatility and Procyclicality

Fair value measurement is also blamed for contributing and exacerbating the subprime crisis. Since gains and losses in FVTPL category affect the income statement, an increased volatility would be observed in net income resulting from the current market conditions. Financial distress or crises are followed by short-run decrease in market prices. Under FVA, when assets are marked down to the lower prices, firms, and banks in particular, may be forced to dispose even more financial assets to avoid violating regulatory solvency constraints. Thus these additional disposals can further depress the market prices causing understated values resulted in overstated losses, and exacerbate the threat of contagion and systemic failure of the financial system (Cifuentes et al., 2005; Krumwiede, 2008; Khan, 2010).

On the contrary, proponents of FVA suggest that fair value measurement is the scapegoat of the crisis and that the ones to be blamed are the firms and banks that

make bad operating, investing, and financing decisions that was poor in risk management or disposed to committing fraud (Ryan, 2008: 16). Shaffer (2010) and Novoa et al (2009) finds no observable evidence that FVA caused the banks to sell investments at distressed prices and these results do not support a pro-cyclical effect that accelerated the decline in market prices.

Laux and Leuz (2009: 829) argues that FVA reduces the risk of systemic failure by providing early warning signals of a crisis on financial reports, and making financial problems more difficult to hide, thus influence banks to take appropriate risk management practices in advance. Moreover, Novoa et al (2009: 110) argue that volatility caused by FVA would not be problematic if market participants are well informed and could correctly interpret the information provided in the financial statements as an evidence of the economic volatility.

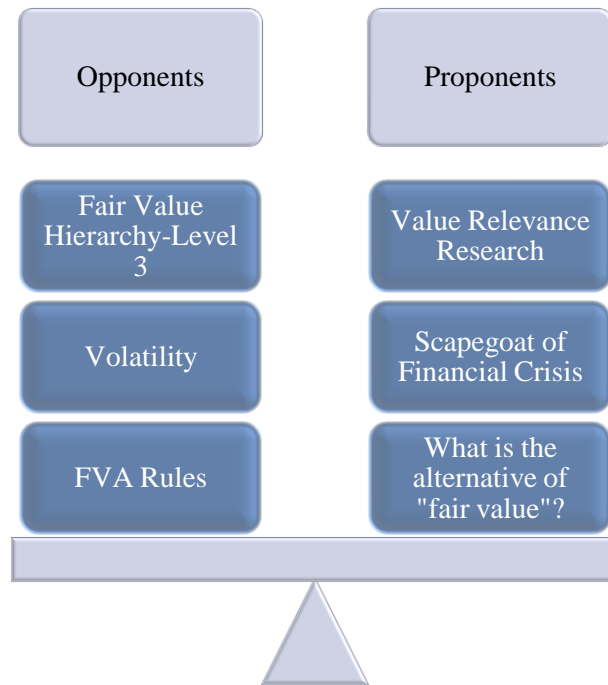
2.4.3. Classification of Financial Assets – Available for Sale Category

One of the issues associated with the move towards a fair value-based accounting regime is the increased discretion on the asset classification of financial instruments. AFS category enables the periodical postponement of income for future financial reporting periods, thus creates new opportunities for gains trading by providing a significant discretion for the management to influence and manage net income of current or future periods (Jordan et al., 1997; Knezevic, 2009).

The accounting treatment for AFS securities does not meet the definition of FVA since unrealized gains and losses are not recognized in income statement until de-recognition. However, AFS category may act as a shield against the increased volatility under FVA besides serving managerial opportunism.

Figure (9) demonstrates the key arguments of the opponents and proponents of fair value measurement in academic research.

Figure 9: Opponents and Proponents of Fair Value Measurement in Academic Research



2.5. CONTEMPORARY DEVELOPMENTS IN STANDARD SETTING - IFRS 9 AND IFRS 13

Emerson et al (2010: 84) points out: *“There may be valid arguments coming from those opposed to FVA, but the reality is that fair value reporting is here to stay in one form or another, and will be further expanded ”* (Emerson et al., 2010: 84).

The criticisms towards FVA by academics and professionals led to new developments in standard setting as the issuance of IFRS 9: Financial Instruments and IFRS 13: Fair Value Measurement.

IASB issued IFRS 9: Financial Instruments as a replacement of IAS 39 in November 2009 which will be effective by January 2013. IFRS 9 represents the results of the IASB and FASB project for the improvement and convergence of financial reporting standards that started by March, 2006 (ACCA, 2011: 1). IASB sets the objective of this project as *“to improve the usefulness of financial statements*

for users by simplifying the classification and measurement requirements for financial instruments” (IFRS, 2011: 1).

One of the main differences between IAS 39 and IFRS 9 is the categories of classification. Four categories of IAS 39 have been reduced to three, as the AFS and HTM category have not been preserved in IFRS 9. The three categories are amortized cost, FVTPL, and FVTOCI. Additionally, the requirement of recycling unrealized gains and losses previously taken to equity upon de-recognition of the financial asset is eliminated for reducing the complexity of financial reporting information (ACCA, 2011: 1). According to IFRS 9, prior AFS category may be classified as FVTPL or FVTOCI. Thus FVTOCI category is preserved, however amounts presented in other comprehensive income as changes in fair value, and gains or losses realized on sale of assets are not recycled to profit or loss, whereas remain in equity.

IFRS 13: Fair Value Measurement is issued in May 2011 and will be effective by 1 January 2013. IFRS 13 defines fair value as the “*price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e. an exit price)*”. By including “exit” price in the definition, fair value is defined as a market-based measurement, not an entity-specific measurement and fair value should be determined as the exit price from the perspective of the seller (Dvarokova, 2011: 152).

IFRS 13 sets out in a single IFRS a framework for measuring fair value and requires new disclosures about fair value measurements (Deloitte, 2011).

This chapter provides a review of the literature on fair value measurement focusing on the main critical aspects FVA. In sum, critics mainly focus on the impact of FVA on bank financial reports through the financial instruments measurement. Thus although FVA applies to all types of firms it has an especially large impact on banks, since the asset balance of these financial institutions are dominated by financial instruments.

The notion that the proponents of FVA drive the opponents into the corner is the lack of the suggestions for alternative valuation bases. HCA has proven its inadequateness in Savings and Loans Crises in 1980s (Michael, 2004: 120) and Japanese banking crisis in 1990s by hiding the insolvency of many financial

institutions due to the slow recognition of losses, however FVA may have reduced the effects of these crises (Laux and Leuz, 2009: 829). Moreover, the evidence presented by value relevance literature is the key strength of the proponents.

IASB respond to the criticisms related to the reliability of Level 3 fair value measurements and discretion in asset classification by the issuance of IFRS 13 and the replacement of IAS 39 with IFRS 9. These contemporary developments reveal the persistence of the standard setters in fair value accounting. These developments also reveal the role of academic research in accounting standards.

Questions may rise about the elimination of AFS category by the issuance of IFRS 9 although the FVTOCI is still a category. However this study asks: How did banks use AFS category for managing earnings under IAS 39? What are the banks incentives to manage earnings? And can the elimination of one opportunity abolish the incentive? If not, what factors constrain bank earnings management? This study attempts to answer these questions in light of the corporate governance literature.

Ownership Structure is a corporate governance mechanism against agency problems. The following chapter discusses ownership structure as an EM constraint and attempts to address the question of “what constraints EM to beat the thresholds?” on the grounds of corporate governance literature.

CHAPTER THREE
IMPACT OF OWNERSHIP STRUCTURE
ON EARNINGS MANAGEMENT

Healy and Wahlen (1999: 366) suggest that the increasing use of professional judgment in financial reporting has trade-offs: It enhances the use of the managers' private information and opportunities to choose reporting methods that reflect the firm's underlying economics accurately; however, creates opportunities for EM.

Byrne et al. (2008: 29) argues that where management has discretion over how the standard is applied, financial accounts remain opaque.

Barth and Taylor (2010: 27) caution earnings management research for not be centered upon the desirability of accounting methods; the managers are the ones to be blamed for earnings management, not the accounting rules.

Agency theory argues that corporate governance and accounting information are linked. Cohen et al. (2004: 87) points out that one of the most important functions of corporate governance is ensuring the quality of the financial reporting process.

This study attempts to answer its research question of "What constrains/enhances bank EM?" in light of the corporate governance literature. accordingly, this section presents the theoretical background of the role ownership structure in mitigating agency costs.

3.1. THEORETICAL BACKGROUND

Corporate Governance addresses agency problems related to the information asymmetries between agents, caused by the separation of ownership and control, through internal and external controlling mechanisms. Information asymmetries exist when agents have a more complete set of information about the firm than owners (Beatty and Harris, 1998: 299). One of the main internal mechanisms in Corporate Governance is the ownership structure of firms together with the board of directors. The main external mechanisms are "market for control" and the legal system (Dennis and McConnell, 2003: 2).

In 1776, Adam Smith argued that principals are people that have the ability to provide capital and agents are capable of using that capital effectively. In other words, people that own the capital may not have the proficiency to use it. Therefore agents manage other people's money and generate agency relationships.

After the 1929 crash in US, Berle and Means (1932) explored the evolution of big business and reported that dispersed ownership is widespread in modern cooperation of US. According to Berle and Means (1932) point of view, when ownership structure is dispersed, the main agency problem rise between owners and managers, and increasing ownership concentration empowers the owners as a mechanism to solve agency problems.

Jensen and Meckling (1976: 5) define agency relationship as “*a contract that one person/people (principal) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent*”. However, Jensen and Meckling (1976) also point out that the agent will not always act in the best interest of the principal that leads to agency conflicts. Fama and Jensen (1983: 302) defined the organizations based on agency theory as:

“An organization is the nexus of contracts, written and unwritten, among owners of factors of production and customers. These contracts or internal "rules of the game" specify the rights of each agent in the organization, performance criteria on which agents are evaluated, and the payoff functions they face”. Fama and Jensen (1983: 302)

Shleifer and Vishny (1997: 737) signify the aim of corporate governance as dealing with the agency problems between owners and managers and questioning how to assure financiers that they get a return on their financial investment. Shleifer and Vishny (1997: 754-758) point out that dispersed ownership structure is more common in Anglo-Saxon market based common law countries as US and UK. In these countries the main ownership problem is between owners and managers as Berle and Means (1932) predict. In common law countries, because the legal protection minority shareholders are higher, ownership is dispersed as a consequence. In contrast, in bank based countries as continental Europe, ownership is heavily concentrated, and large shareholders also control the firms. Ownership concentration may act as a corporate governance mechanism against the agency

problems between owners and managers; however large shareholders' interests may coincide with minority shareholders. Since large shareholders are empowered by controlling rights, the main agency problem in these countries would raise between the controlling and minority shareholders. This determination by Shleifer and Vishny (1997: 758) signifies the importance of legal protection of investors and of ownership concentration in corporate governance.

Therefore, as Shleifer and Vishny (1997: 758) point out, although ownership concentration is an important corporate governance mechanism in bank based countries, it creates a trade-off. The large shareholders with controlling rights monitor the managers in favor of minority shareholders. However, they may also entrench by pursuing their private goals that differ from profit maximization and may be harmful to minority shareholders (Maury and Pajuste, 2005: 1814). In other words, "entrenchment effect" takes place when the controlling shareholders expropriate private benefits at the expense of minority shareholders (Laeven and Levine, 2008: 579). Accordingly, Dennis and McConnell (2003: 3) argue that managerial ownership would align the interests of shareholders and mitigate owner-manager conflicts, however higher equity ownership by managers leads to entrenchment effect and enhance agency problems with minority shareholders.

As literature examined the relation of ownership concentration and agency problems, La Porta et al (1999: 472) provided evidence on the identity of the concentrated owners examining 27 wealthy economies of the world. They determined that in these countries the legal protection of minority shareholders are poor, hence ownership was heavily concentrated to control the managers; and large owners were commonly state or families that have control over firms in excess of their cash flow rights that also participate in the management of the firms. Since the power of the state and families is not controlled by other large shareholders, these controlling shareholders may expropriate minority shareholders. Therefore, the seminal work of La Porta et al (1999) raised questions as: Are the agency problems between controlling and minority shareholders differentiate due to large shareholder identities? Which types of large shareholders mitigate or enhance the agency problems? Are second large shareholders other than the controllers effective in monitoring the potential entrenchment of the controlling shareholders?

Literature suggest that family-group ownership enhance the entrenchment effect, however concentrated external stockholdings such as institutional and foreign institutional investors can mitigate agency problems since institutions have more resources and relevant expertise compared to individual investors and domestic institutions; moreover they focus on long term profitability in favor of minority shareholders; which also results in strong incentives to monitor the management (Admati et al., 1994; Chung et al., 2002; Farooq and Jai, 2012). Another stream of the literature focuses on whether the firms have single or multiple controlling shareholders. This stream argues that if there is another significantly large shareholder other than the controller, the bargaining problems between the large shareholders protect minority shareholders; thus the presence of multiple large shareholders may mitigate agency problems (Gomes and Novaes, 1999: 1) which will be discussed in more detail in Section (3.3.4).

3.2. AGENCY PROBLEMS IN BANKING INDUSTRY

Agency theory focuses on agency problems between owners, managers, and minority shareholders. However, it is criticized by the “Stakeholder Theory” (Freeman, 1984) which argues that the firm should serve wider interests of stakeholders such as employees, creditors, suppliers, customers and local communities rather than shareholders only; hence the interests of the other stakeholders must be considered in corporate decision-making (Letza et al., 2004: 243). This criticism is more relevant in banking industry, since corporate governance functions differently in banks compared to other organizations due to more complex agency problems and banks’ crucial role in the economy. Ciancanelli and Gonzales (2000: 4) highlight that this difference is related to the additional information asymmetries. As well as between owners and managers and controlling and minority shareholders, the information asymmetry also occurs: “*Between depositors, the bank and the regulator, between owner, managers and the regulator and between borrowers, managers and the regulator*” (Ciancanelli and Gonzales 2000: 6). Due to these additional agency problems, moral hazard problems may arise in the relationship between banks and their stakeholders.

3.3. OWNERSHIP STRUCTURE AS AN EARNINGS MANAGEMENT CONSTRAINT

3.3.1. Earnings Management as an Agency Cost

There are costs associated with agency relationships as costs of monitoring and bonding. Jensen and Mecking (1976: 308) define agency costs as the sum of the:

“Monitoring expenditures by the principal, the bonding expenditures by the agent, and the residual loss” Jensen and Mecking (1976: 308).

The residual loss is the key agency cost (Williamson, 1998: 572), and it is the difference between the agent’s decisions and the decision that refers to the best interest of the owner that maximizes the owners’ benefits.

Accounting information aims to mitigate agency problems resulted from information asymmetries (Warfield et al., 1995). EM however, masks the real performance and lessens the ability of shareholders to make informed decisions that maximize their welfare, exacerbating agency costs. Therefore, EM is viewed as an agency cost in literature (Beatty and Harris, 1998; Xie et al., 2003).

Consistent with the “Stakeholder Theory”, Prior et al. (2007) and Zahra et al. (2005) suggest that managers are agents of stakeholders as well as shareholders, thus EM additionally misleads other stakeholders and may have severe consequences for the whole society. The residual cost then would be higher in banking industry due to the additional agency problems.

From this perspective, the impact of ownership structure on EM is widely examined in literature as well as other corporate governance mechanisms, searching the structures that mitigate EM practices. Because the shareholders of the banks are frequently institutions, this study highlights two ownership structures as foreign institutional shareholders and the existence of multi large shareholders (MLS) for mitigating bank EM. However since most studies exclude banks from their sample,

evidence on ownership structure and EM is limited for banking industry except the evidence on the relationship of public ownership/listing status and bank EM.

3.3.2. Public Ownership

Although literature provides limited evidence on bank ownership structure and EM, listing status of banks that reflects whether the banks are publicly owned or not is investigated thoroughly. Beatty and Harris (1999: 300) point out that the focus on the share prices of public firms/banks and their more dispersed shareholdings lead to more incentives to manage earnings relative to those of private firms. This is consistent with the view that: “*ownership structure may affect the incentives to misrepresent firm performance through EM by affecting the penalty for reporting poor earnings and the incentives to avoid doing so*” (Biurrun, 2010: 2).

Beaver et al. (2003: 348) examine the relation between the distribution of reported earnings and loss reserves which is a widely used measure of managerial discretion in the property casualty insurance industry. Beaver et al. (2003: 363) found that public companies manage loss reserves to avoid losses, yet private companies do not.

Beatty and Harris (1999) and Beatty et al. (2002) analyze the US banking industry. They report that publicly held banks reflect less concentrated ownership; therefore monitoring costs are higher than private banks, additionally public banks have more short-term oriented investors that create an incentive to manage short term earnings. Beatty and Harris (1999) and Beatty et al. (2002) report that public/listed banks consistently engage in more EM than private banks.

In contrast, international evidence and US based research does not show the same results. Biurrun (2010: 11) analyzed banks from 47 countries over the period of 1990 and 2006 and found no difference in EM behavior of public versus private banks.

The conflicting findings may be attributable to the dispersed ownership or the absence of a large controlling shareholder of public banks in US. However in other countries, listing status may not reflect dispersed ownership. Publicly held banks may still have large and concentrated owners. Accordingly, Gebhardt and Farkas

(2010: 17) suggest that dispersion in the ownership varies significantly within the group of public banks. Therefore single-country based evidence is needed to answer whether public ownership itself generates incentives to manage earnings when there are also large controlling shareholders in banks.

3.3.3. Foreign Institutional Shareholders

Literature provides two distinct views on the effect of foreign institutional shareholders and EM relationship.

From the 'Berle and Means' point of view, literature suggests that foreign institutional ownership might provide better monitoring in firms and mitigate EM practices due to their long term orientated investments and expertise (e.g. Seasholes, 2004; Farooq and Jai, 2012). This stream also suggests that foreign shareholders from common law countries have technological advantages. Additionally, the external resources of capital may serve the interests of minority shareholders and other stakeholders. Therefore, foreign institutional shareholding is associated with lower levels of fraud and EM (Chen et al., 2006; Firth et al., 2007; Bae and Jeong, 2007).

However, the other stream of the literature argues that foreign institutions may not be long term oriented specifically in emerging countries and during financial crises. Moreover, they have an information disadvantage compared to domestic firms caused by the geographical and cultural distance and emerging countries in particular provide lower amount of publicly available information that leads to a higher information asymmetry between domestic and foreign shareholders. (Ramaswamy and Li, 2001; Frenkel and Menkoff, 2004). Some studies found that this additional information asymmetry also leads to less lending to small businesses and more EM (Chen et al., 2007; Berger et al., 2001).

In case of banking industry, there is substantial evidence on the effects of foreign institutional shareholders on domestic bank performance and efficiency; however evidence on the EM practices is limited. Literature points out that in emerging markets, foreign banks are more profitable and more efficient than domestic banks (Demirguc-Kunt and Huizinga, 2000; Bonin et al., 2005) however

they are in more developed countries (Claessens et al., 2001; Claeyns and Hainz, 2006).

Frenkel and Menkoff (2004: 1280) argue that the more important the local knowledge is the less effective the expertise and technological advantages. And if the presence of foreigners is politically acceptable in the country's banking system, because of external sources of capital, existing information asymmetries may be reduced.

3.3.4. Multi Large Shareholders

Since concentrated ownership is more common in the non-Anglo Saxon countries, the contemporary research departed from Berle and Means (1932) and have focused on the conflicts of interest between controlling and minority shareholders due to the entrenchment of controllers (La Porta et al., 1999; Boubaker and Sami, 2011; Ali et al., 2007). Besides foreign institutional ownership that mitigates the agency costs of monitoring managers, there is substantial evidence that the multiple large shareholders (MLS) mitigate EM from the Shleifer and Vishny point of view, by monitoring the controlling shareholder.

For the entrenchment effects of concentrated shareholders, literature suggests a key solution as "contest to control" (Shleifer and Vishny, 1997; La Porta et al., 1999; Maury and Pajuste 2005; Boubaker and Sami 2011). This view argues that the presence of a second large shareholder other than the controller protects minority shareholders through competition for control. Therefore, MLS ownership structure is an internal corporate governance mechanism that benefits minority shareholders (Pagano and Roell, 1998; Attig et al., 2008).

Gomes and Novaes (2000: 33) investigate the optimum ownership structure for the protection of minority shareholders. They present evidence that the presence of MLS protect minority shareholders when the controlling shareholders do not have common interests due to the bargaining problems between the large shareholders. However the presence of MLS also creates a trade-off. These bargaining problems may also lessen the firm value if MLS cannot agree on choosing the efficient investment projects. To solve this trade-off, Gomes and Novaes (2000: 33) suggest

that MLS “should” be present in the favor of minority shareholders particularly in firms with:

“1) Large costs of diluting minority shareholders,

and / or

2) Large financing requirements.” (Gomes and Novaes, 2000: 33)

Maury and Pajuste (2005: 1815) signify one other trade-off of the costs and the benefits of MLS ownership structure that depend on the type of the large shareholders. Some MLS may collude with the controller and deepen the agency problem with the minority shareholders, whereas other MLS may be more effective monitors. Their data consist of 136 non-financial Finnish listed companies that have at least one large shareholder with more than or equal to 10% of the votes. They found that if large shareholders that form MLS are all family-controlled firms, this ownership structure is negatively related to firm value. However, if the family-controlled firm has a second large shareholder as a financial institution, this ownership structure is positively related to firm value. Therefore, the incentives to collude with or to monitor the controlling shareholder are affected by the type of the shareholders. Maury and Pajuste (2005: 1833) conclude that the contestability of the controlling shareholder can mitigate the expropriation of minority shareholders, and they suggest future research to examine the comparisons of the relation between control contestability in countries with different degrees of investor protection.

Gutierrez and Tribo (2003: 3) analyze Spanish firms and report that firms where control is shared by several shareholders outperform firms with a single large controlling shareholder in terms of return on assets. Their results hold for firms where control is not shared but there are non-controlling large shareholders, which indicate that the non-controlling shareholders play a monitoring role as well. Gutierrez and Tribo (2003: 25) additionally find that firms with higher monitoring costs, larger rents, more opaque firms, close firms, non quoted firms, family firms and firms where the largest shareholder is also the CEO are more likely to adopt MLS ownership structure.

Attig et al. (2008: 722) presents evidence from 8 East Asian and 13 Western Europe countries on the relationship of the presence of MLS and the cost of equity capital. They found that the presence of MLS with comparable voting rights mitigate agency costs and lowers firm's cost of equity capital since a high risk of control contestability of the largest controlling shareholder is likely to enhance firm's information quality and thus lower cost of equity capital. Consistent with Maury and Pajuste (2005), Attig et al. (2008: 730) also investigated the types of MLS. According to their results, when the two largest shareholders are families, the information risk is thus the cost of equity capital is high. However, if one of the large shareholders is the State the agency costs are mitigated and the cost of equity is lowered. Therefore they conclude that the type of the second largest shareholder shapes the risk of corporate expropriation in family controlled firms.

Cronqvist and Fahlenbrach (2007: 1) calls attention that the current literature that examines MLS, ignores the fact that large shareholders are heterogeneous as they differ from each other in investment and governance styles. They analyze US public firms for the period of 1996 to 2001 aiming to examine the association between the large shareholder heterogeneity and performance. They report that the large shareholder categories such as activists, pension funds, corporations, individuals, private equity firms, and mutual funds. Cronqvist and Fahlenbrach (2007: 30) ask:

“We study heterogeneity across large shareholders among large U.S. firms, but how do our findings compare to those from samples of smaller firms, where the scope for influence might be greater, or countries and institutional environments with different corporate governance systems?” (Cronqvist and Fahlenbrach 2007: 30)

Trainer (2011: 25) analyzes the association between large shareholder heterogeneity and EM. As a proxy for the heterogeneity, Trainer (2011: 37) uses a variable that captures the various types of large shareholders present in a given firm-year observation and finds that in MLS ownership structure, the more heterogeneous the large shareholders are, the less EM.

Corporate governance literature provides evidence on the ownership structures that address agency costs. According to the literature, ownership structure is an EM constraint.

Public ownership, foreign shareholders, and MLS ownership structures are found to affect earnings management. However, evidence on bank ownership is limited.

On the grounds of “one size does not fit all”, next section will examine the recent changes in ownership structures of Turkish banks.

CHAPTER FOUR

TURKISH BANKING SYSTEM

This section focuses on the changes of the ownership structure of Turkish banks by 2006. One other aim of this chapter is to illustrate the importance of the period after 2006 in terms of regulatory environment and increased foreign entry to the system.

The section proceeds as follows. The second section presents a historical overview of Turkish banking system. Third section focuses on the reasons of increased foreign entry in Turkish banking industry, followed by criticisms of foreign entry. Fifth section reflects the ownership structure of the deposit banks, and next the financial reporting environment. The seventh section searches the literature for evidence on EM practices of Turkish banks. The eighth section summarizes the chapter.

4.1. HISTORICAL OVERVIEW

Several financial crises have occurred in the history of the Turkish economy, following a period of rapid economic growth during the 1980s. In 1982 –1985 period 3 banks were merged with the state-owned Agriculture Bank and then liquidated and two large banks were restructured. The rescue cost of these actions was equivalent to 2.5 percent of GNP (Worldbank, 2003).

The Turkish economy was put under global pressure during the 1990s which resulted in an increase in exchange rates. The 1994 crisis emerged as a result of short-term debt payment problems, and decreased availability of internal credit. The 1994 crisis initially started in the exchange markets, followed by an increase in interest rates and inflation in the country. In April 1994, three banks failed, and until June 1994 the country spent 1.1 percent of GDP to recover the system. The government launched an economic stability program which addressed short-term issues but was not able to solve major problems. As a result, the Turkish economy became vulnerable to the impacts of the Asian crisis in 1997 (Muslumov and Karatas, 2001: 92).

After the 1994 crisis, the government introduced a full deposit insurance system, which contributed significantly to arising moral hazard problems in the banking sector, while the government placed weakened banks on the Treasury's surveillance list for poor financial status, exhibited an unwillingness to close them (Kibritcioglu, 2005: 2).

Thus, in early 1990s, Turkey had an "over-branched" and "over-staffed" banking system caused by the bad macroeconomic policies of governments, along with excessive risk-taking preferences of banks, and the banking system was became fragile to systemic crisis (Zaim, 1995; Akcay, 2001; Kibritcioglu, 2005).

During the 1990s, the Turkish banking sector had been dominated by inefficient public banks and the sector had serious deficiencies such as high foreign currency, interest rate and liquidity risks (Kenc et al., 2011: 2). Gunay and Gunay (2007: 167) point out that the banking system in 1990s was also "over-banked" due to high rates of return on government bond investments that made possible the survival of many banks, which otherwise would have failed. The sector was also far away from sound governance principles (Sayilgan and Yildirim, 2009: 208).

1997–2000, represents a new era of both expansion and consolidation in the banking sector. In 1997, more than 10 new small-scale banks were established and 4 of the existing state banks were privatized. This period reflects a policy shift towards a more competitive market with a small and fragmented banking structure (Ozkan-Gunay, 2004: 111). Meanwhile, the number of state-owned banks in the sector diminished from 12 in 1980 to 8 in 1990, and then to 4 in 1999. Additionally, in 1999, the "Savings Deposit Insurance Fund" (SDIF) took over 6 insolvent banks, using the authority given to it in 1994 when full deposit insurance was introduced.

However, the wave of the financial crisis that began with East Asia by 1997, and continued with Russia and Brazil by 1998, hit Turkish capital markets in 2000, and structural problems in the financial sector in the country deepened the crisis. The liquidity crisis of the financial sector became more pronounced in November 2000, and the following financial crisis in February 2001, caused major and dramatic changes in the banking sector of Turkey. Ozatay and Sak (2002: 1) state that the actual cause of 2001 crisis was the combination of a fragile banking sector and a set of triggering factors that made this fragility clear.

When the 1994 and 2001 financial crises are compared, it can be seen that the 2001 financial crisis was the end of a prolonged and continuous decline in the economy. Thus, the duration and extent of loss caused in the economy was rather extensive.

In late 1999, the public units responsible for the surveillance and supervision of the banking sector were united under the title of “Banking Regulation and Supervision Agency” (BRSA) and the Agency started to operate as of August 31, 2000, just before the crisis of November 2000. The aim of the Agency was declared as to eliminate the structural problems in the financial system and to adopt the regulations necessary to promote an efficient, globally competitive and sound banking sector (BRSA, 2001: 9).

Consistent with the argument that especially in countries with poorly-developed capital markets, accounting standards, and legal systems with weak institutional environments will benefit more from official supervisors and regulators containing excessive risk-taking behavior of banks and thereby instilling more confidence in depositors than would exist with private-sector monitoring (Barth et al., 2001b: 14).

The BRSA took full control of bank supervision by September 2000, addressing issues such as regulations on risk management and capital adequacy (Gunay and Gunay, 2007: 168). Within this process, 14 banks were transferred to the SDIF before the restructuring program in the sector.

Throughout the period between 1994 and 2003, 25 banks were exposed to expropriation in Turkey. Moreover, nearly 36,000 bank employees (out of a total of 174,000) lost their jobs and more than \$25 billion were spent restructuring the banking system in this period (Erbil and Salman, 2008: 6). Owners/executives of Sumerbank, Egebank, Yurtbank, Etibank, Bank Kapital, and Imarbank were arrested.

Following the 2001 crisis, the government initiated “Banking Sector Restructuring and Rehabilitation Program” in 2002, which aimed recovering the deterioration caused by the 2000 - 2001 crisis in the banking sector and building a strong base for the system by clearing it from weak banks, and transitioning to an internationally competitive banking sector which will be stable to internal and external shocks. The strategy under the Program rests on four main chapters: (1) the

financial and operational restructuring of state banks, (2) the resolution of the banks under management of the SDIF, (3) the strengthening of private banking, and (4) the strengthening of the legal and regulatory environment (BRSA, 2009: 38-39).

In May 2004, BRSA changed the full insurance system and declared that only the first 50,000 Turkish Lira of any deposit would be under guarantee, which covered 64 % of all deposits. A new law tightened the limits of loan exposure. Banks were obligated to maintain a minimum 8% of net-worth-to-risk-asset ratios and net general foreign-currency positions were limited to 20% of their capital base (Erbil and Salman, 2008: 7).

The continuous regulation process in banking sector was finalized by the introduction of a new Banking Law No. 5411, in November 2005. New Banking Law built a significant opportunity for ensuring financial stability, improving the sector, strengthening implementation and regulation framework, protecting the rights and benefits of savers and strengthening of institutional ability, and formed a new forward-looking financial structure is issued.

In its more systematic and easily understandable structure, Law No. 5411 the corporate governance principles entered into the legislation aiming the protection of minority shareholders. Moreover, previous regulations on accounting, financial reporting and independent external audit are aligned with international standards.

The framework of this new approach is summarized in Table 3.

Table 3: Framework of New Approach in Regulation

| <i>New Approach</i> | <i>Components</i> |
|--------------------------------------|---|
| <i>Better Regulation</i> | <i>Making regulations in consultation with shareholders, by informing public and conducting impact analyzes</i> |
| <i>Flexible regulatory framework</i> | <i>Adopting principle based regulation approaches as far as possible (such as accounting, risk, corporate governance)</i> |
| <i>Increasing efficiency</i> | <i>Applying BRSA regulations with all its components</i> |
| <i>Expansion of scope</i> | <i>Ensuring regulation convergence in addition to leaving no unregulated field in institutions, markets and instruments subject to BRSA supervision (non-bank financial institutions, external audit institutions, rating and valuation institutions as well as commercial banks and participation banks are subject to the supervision of the BRSA).</i> |
| <i>Global compatibility</i> | <i>Preparing regulations in conformity with international principles and standards and which do not create regulation arbitrage</i> |

Source: BRSA (2009:27)

In sum, the major banking regulation waves in Turkey took place; (1) in 2002 by restructuring and rehabilitation program for banking sector, (2) in 2004 by moving from full deposit insurance system, and (3) and on November 1, 2005 by the new Banking Law (Nr. 5411).

There's no doubt that each of these banking regulation waves contributed to the settlement of a sound banking system in the country, and they can be seen as the complements of each other. Technically, it's understandable that each of them consists of the requirements of the previous regulation(s) and adds its original contribution to the system.

In this manner, the major original contribution of the Banking Law (Nr. 5411) to the system is its corporate governance related requirements. Table 4 shows corporate governance requirements of Turkish Banking Law. Among others, new regulations on financial information disclosure and auditing of banks, the restructured responsibilities of the board of directors and prohibition of CEO duality can be seen as brand new rules for the banking system in Turkey.

Table 4: Renewals of law Nr. 5411 from the Corporate Governance point of view

| | |
|-------------------|---|
| Article 16 | Banks shall keep their up-to-date articles of association on their websites. In case of any amendments, the articles of associations shall be updated within ten working days following the date of amendments. |
| Article 22 | BRSA shall determine the structures and processes of corporate governance and the applicable principles, upon consulting the Capital Market Board and associations of institutions. |
| Article 23 | General manager and the chairman of board of directors shall not be the same person. |
| Article 23 | The responsibilities of the board of directors shall include ensuring the establishment, functionality, appropriateness and adequacy of internal control, risk management and internal audit systems in conformity with the applicable legislation; securing financial reporting systems; and specification of the powers and responsibilities within the bank. |
| Article 24 | Banks' board of directors shall establish audit committees for the execution of the audit and monitoring functions of board of directors. Audit committee shall consist of minimum two members. Audit committee members shall be appointed amongst the members of the board of directors who do not have executive duties. |
| Article 30 | Within the scope of internal control system, banks shall (i) ensure the execution of their activities in compliance with the legislation, internal |

| | |
|-------------------|---|
| | regulations and banking ethics; (ii) secure the integrity and reliability of accounting and reporting systems and timely accessibility of information through continuous control activities to be complied with and performed by the personnel at any level; (iii) ensure the functional distribution of the duties and the sharing of powers and responsibilities the fund payments, the reconciliation of bank's transactions, protection of assets and control of liabilities; (iv) identify and evaluate any risk encountered and prepare the infrastructure required for managing such risks; and (v) establish an adequate information exchange network. Internal control activities shall be carried out by the internal control department and the internal control personnel to work under the board of directors. |
| Article 39 | The Board-requested financial reports prepared by banks shall be signed, with names, surnames and titles indicated, by the chairman of the board of directors, the members of the audit committee, general manager, deputy general manager responsible for financial reporting as well as the relevant unit manager or equivalent authorities, declaring that the financial report is in compliance with the legislation pertaining to financial reporting and with the accounting records. |
| Article 40 | Banks shall prepare an annual activity report that includes information about their status, management and organization structures, human resources, activities, financial situations, assessment of the management and expectations from the future; together with financial statements, summary of board of directors' report and independent auditing report. The principles and procedures regarding preparation, submission and publication of the activity report shall be established by the Board. |
| Article 41 | The board of directors shall be responsible for setting the basic policies, duties, powers and responsibilities pertaining to financial reporting system, including the accounting of activities, preparation, approval, audit, submission to relevant authorities and the publication of financial statements, for making information systems efficient and supervising its implementation. |

Source: Banking Law Nr. 4389, Banking Law Nr. 5411

The impact of regulations was remarkable for the Turkish Banking Sector. According to BAT (2007), the sector's total assets grew by 51 percent in TRY constant prices and 167 percent in dollar terms compared to 2002. The total assets of Turkish Banking sector raised up to 347 billion USD from 130 billion.

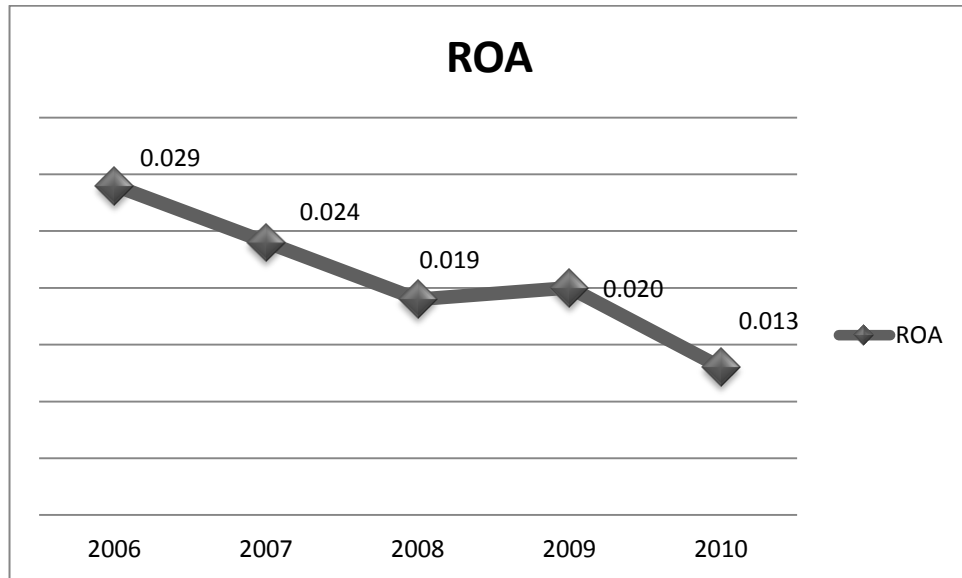
According to Sayilgan and Yildirim (2009: 208), “*Banking Sector Restructuring Program has contributed much to the formation of a resilient and strong banking sector*”.

On November, 2006, Regulation on Measurement and Evaluation of Liquidity Adequacy of Banks and Regulation on Measurement and Evaluation of Capital Adequacy of Banks were also issued.

The efforts of the BRSA came to fruition as of the end of 2009. As end of 2009, although the global financial crisis affected Turkish economy negatively, (*Income dropped, foreign trade volume diminished, budget deficit grew, unemployment rate increased, and capital inflow declined in parallel to the world economy*) (BAT, 2010: 13), Turkish banking sector recorded a good performance and contributed to financing of economic activities in 2009 (BAT 2010: 18). However, specifically the profitability of the banks was the focal point of the public and press in Turkey during the global financial crisis. The press releases of the public units called attention that the profitability of the sector was stable throughout the recent global crisis, and the capital adequacy ratio of the banks was higher than the banks of other Western countries.

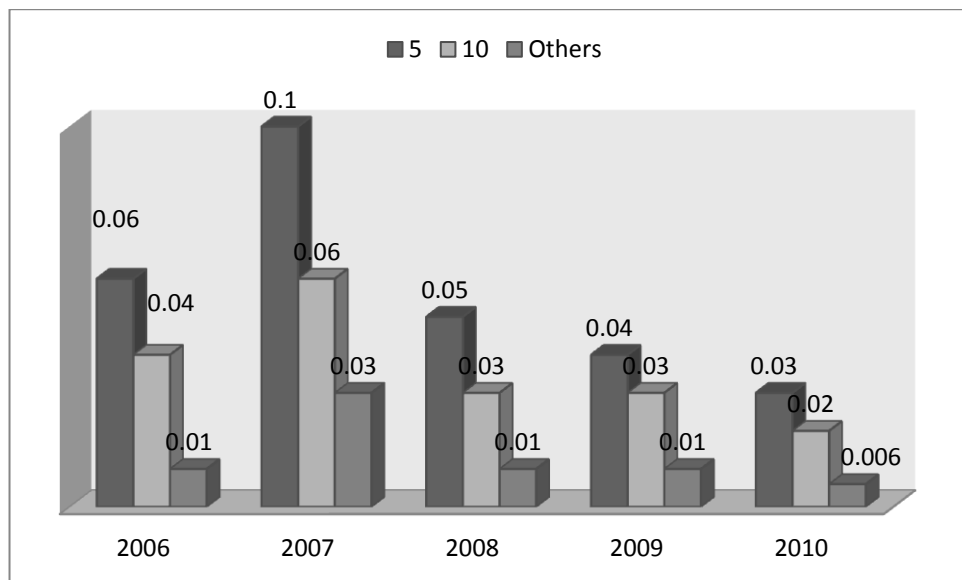
However, according to the Banking Association of Turkey general secretary, Ekrem Keskin’s press release on 27 May 2009, “*The margin between the profit rates of banks and the rate of return of the Treasury bills is positive only for a single group - the public banks. It is negative for the private banks and the foreign banks in Turkey*”. Throughout 2006-2010, solely four percent of the banks reported losses, ten percent recorded high profits, while remaining was very near to zero in terms of return on assets. Figure (10) presents the trend of deposit bank earnings during 2006-2010 scaled by total assets. Figure (11) shows the disparity of bank earnings between the first five and ten banks, and others.

Figure 10: Earnings of Deposit Banks scaled by Total Assets



Source: <http://www.bddk.gov.tr>, Financial Reports of Banks

Figure 11: Earnings Disparity among Turkish deposit banks, (2006-2010)



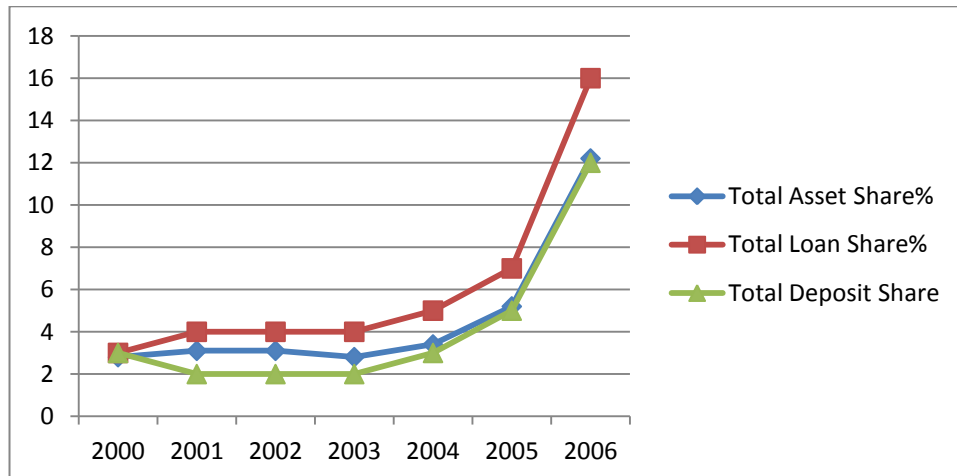
Source: <http://www.bddk.gov.tr>, Financial Reports of Banks

4.2. THE REASONS OF THE INCREASED FOREIGN ENTRY IN TURKISH BANKING INDUSTRY

Turkey had a closed financial system until 1980's. In the 1980s, the economic policies introduced financial liberalization aiming the integration of the Turkish economy with the global financial system, thus the barriers to the entry of foreign banks were eliminated with the regulations that encourage foreign direct investments, and foreign banks started to be seen as branches (Bumin, 2007: 84). However, because of macroeconomic instability and the financial crises in 1990s and 2000s, the existence of foreign shareholders in Turkish banking industry remained limited.

After the 2001 financial crisis, the regulatory developments in the sector, the commencement of the official EU accession talks for Turkey in 2005, opportunities of growth and high profitability, and ease in the acquisition of domestic banks, led foreign banks increase their investments in the country, increasing their numbers and their shares in the system (Akguc, 2007; Worldbank, 2008), for most in 2006. As of 2006, in comparison with the previous year, the total asset share of foreign banks rose up to 13% from 5%; the total loan share rose up to 16% from 7%; and the total deposit share rose up to 12% from 5% (Figure 12).

Figure 12: Sector Shares of Foreign Banks in Turkey, 2000-2006



Source: <http://www.tbb.org.tr/tr/>

4.2.1. Regulatory Developments

Khanna and Palepu (2000: 24) signify that foreign shareholders insist on higher standards of corporate governance and the protection of minority rights. The regulatory developments and the efforts of BRSA on promoting sound corporate governance mechanisms in Turkish banking industry made the industry attractive for foreigners.

Impartiality and openness of the Banking law Nr. 5411 was one another opportunity for foreign institutions. Foreign and domestic shareholders are equally treated under this law, and there is no limit for the foreign ownership. Furthermore, banking law brings forward advantages for foreign shareholders. Apak (2007: 21) calls attention that the new banking law provided important disadvantages for the domestic banks and managers. According to the new law, the shareholders and board members are retrospectively and personally liable for their actions for twenty years that suggests a major advantage for the new foreign shareholders.

4.2.2. Opportunities of Growth and High Profitability

The growth and profit opportunities in banking sector, seems to be the most important factor for the decision of investment by the foreign banks (Bumin, 2007: 88).

Turkish Banking Industry provides growth opportunities and high profits due its high and young population and the existence of potential that will demand banking services. Furthermore, increasing income per capita, geographical disposition on the threshold of Eurasia, accession process with the EU, lowered inflation, and higher interest rates relative to the other Western countries promise profitability (Gokmen and Hamsioglu, 2009: 54).

Bumin (2007: 90) examined the determinants of foreign entry to Turkish banking industry, and found that the profit opportunities offered by the sector is the most significant determinant, using loan volume, consumer banking profitability and inflation rate as proxies.

4.2.3. Ease in the acquisition of Turkish Banks

Throughout the period 1994-2003, many domestic shareholders were out of the system due to the personal liabilities and transfers of SDIF. The remaining domestic banks in the system needed additional capital under the new regulations on capital requirements. Possibly, bearing in mind the bank failures and arrests during 1994-2003 and the new regulations, many of the domestic shareholders preferred to transfer their shares to foreigners which led to an acquisition wave until 2006.

Table (5) shows that the acquisition wave gain momentum after the issuance of the new banking law Nr. 5411, in 2006. Additionally in February 2007, Tekfenbank's 70 % shares were acquired by a Greek bank EFG Eurobank and Oyakbank was acquired by ING Bank in December, 2007. According to Table (5), the nationality of the foreign acquirers shows discrepancy. The acquirers are from common law countries as US, also from Europe and Middle-East. Table (5) also shows that in Turkey, foreign banks have become an important part of the local banking system by 2006.

Table 5: Foreign Acquisitions of Turkish Commercial Banks (2002-2006)

| Transferrer of Equity | Foreign Acquirer Institution | Title after the Acquisition | Date | Home Country of the Acquirer | Equity Transferred (%) |
|----------------------------------|---|--|-------------|---|---------------------------------------|
| Kocbank | Unicredito | Kocbank | 08.08.2002 | Italy | 49.5 |
| TEB | BNP Paribas | TEB | 28.12.2004 | France | 42.1 |
| Disbank | Fortisbank | Fortisbank | 22.06.2005 | Luxemburg-Belgium | 89.3 |
| Yapi Kredi | Koc-Unicredito | Yapi Kredi | 11.08.2005 | Turkey-Italy | 57.4 |
| Garanti Bank | General Electric | Garanti Bank | 22.12.2005 | USA-France | 25.5 |
| Finansbank | National Bank of Greece | Finansbank | 28.07.2006 | Greece | 46 |
| Arapturk | Libyan Foreign Bank | Arapturk | 17.07.2006 | Libya-Kuwait | 47.7 |
| Denizbank | Dexia | Denizbank | 28.09.2006 | Belgium-France | 75 |
| Akbank | Citibank Overseas | Akbank | 06.12.2006 | USA | 20 |
| Sekerbank | Bank Turanalem | Sekerbank | 21.12.2006 | Kazakhstan | 33.98 |
| MNGBank | Arapbank-Bankmed | Turkland Bank | 28.12.2006 | Jordan-Lebanon | 91 |

Source: BRSA (2009: 55)

4.3. CRITICISMS ON FOREIGN ENTRY

However, the foreign acquisitions were severely criticized by Turkish public and press after 2006 claiming that the foreigners should be limited in percentage.

Although, as of 2006, the total asset share of foreign banks was 13%, including the percentages of foreign shares in banks that share control with domestic shareholders and the foreign stock market share, the asset share in fact was 35.9% by 2006 (BRSA, 2006: 33).

Table (6) demonstrates the total asset and loan share of ten largest banks in Turkish banking industry in 2004. Table (6) reveals that all domestic private banks except Is bank, have transferred their equity as fully or partially to foreigners after 2004.

Table 6: Ten largest private banks in Turkish banking industry by 2004

| Rank | Banks | Asset Share | Banks | Loan Share |
|------|-------------|-------------|-------------|------------|
| | | % | | % |
| 1 | Is bank | 12.6 | Akbank* | 12.5 |
| 2 | Akbank* | 11.4 | İs bank | 12.1 |
| 3 | Garanti* | 8.6 | Garanti* | 10.2 |
| 4 | Yapı Kredi* | 8.0 | Yapı Kredi* | 9.7 |
| 5 | Finansbank* | 2.8 | Finansbank* | 5.0 |
| 6 | Disbank* | 2.3 | HSBC | 3.4 |
| 7 | Denizbank* | 2.2 | Oyakbank* | 3.4 |
| 8 | Oyakbank* | 2.0 | Disbank* | 3.0 |
| 9 | HSBC | 1.7 | Denizbank* | 2.5 |
| 10 | TEB* | 1.2 | TEB* | 1.5 |
| | | | | |

Source: <http://www.bddk.gov.tr>, Financial Reports of Banks

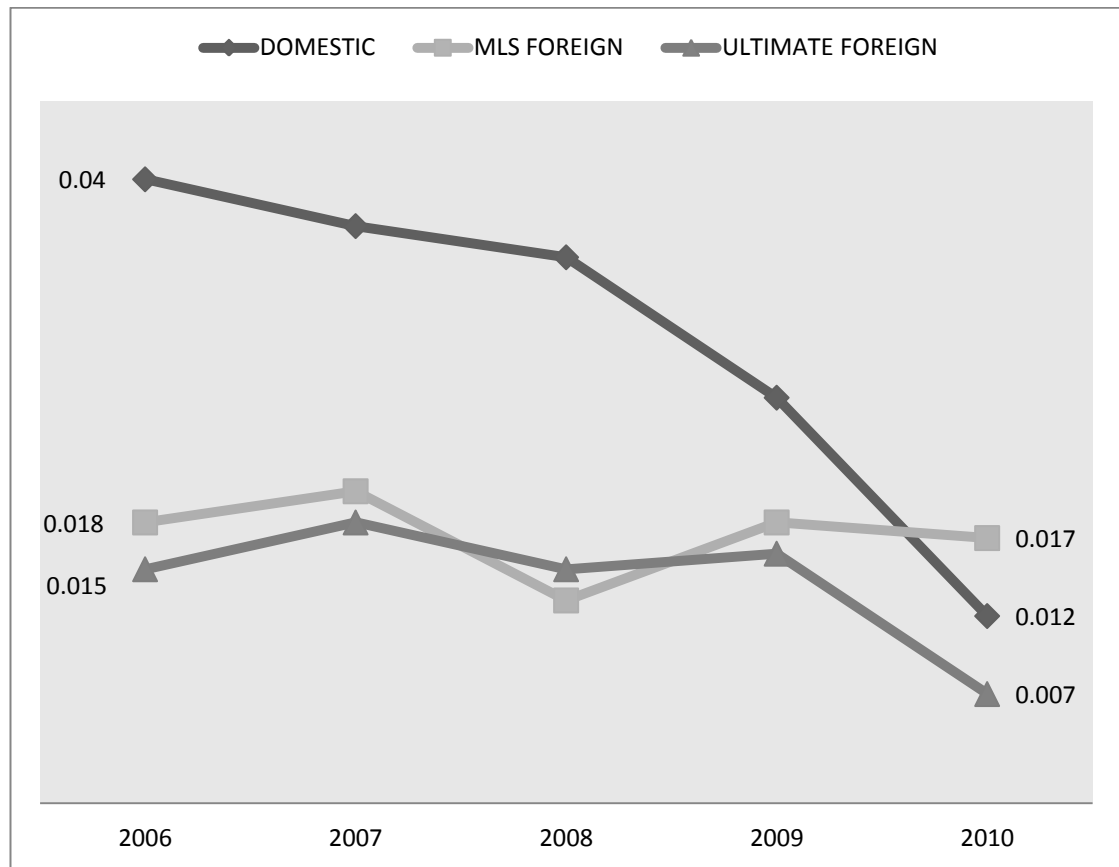
*Equity transferred to foreigners after 2004.

Contrarily, academic research that focuses on the effects of foreigners on domestic banks after 2002 point out that foreigner effect is insignificant in terms of profitability and risk taking (Kose, 2009; Kalgay, 2010) and domestic banks are more efficient (Ata, 2009).

Karabiyik and Gokmen (2012: 40) aimed to classify the foreign deposit banks according to their share structure and financial ratios. They classified banks as “foreign” and “banks with foreign capital”. Their analysis revealed the importance of the financial behavior and perceptions of Turkish investors in banking industry. They point out that after the recent global financial crisis; Turkish investors transferred some of their deposits from the foreign banks to the large domestic banks due to the low level of risk taking behavior regardless of the interest rate advantages of foreign banks. However, banks as Yapi Kredi, Akbank, and Garanti are not perceived as banks with foreign capital in Turkey. Consequently, Karabiyik and Gokmen (2012: 50) recommend the foreign banks to merge with domestic banks in Turkish Banking Sector.

Accordingly, figure (13) shows that the foreign banks that merged with domestic banks report higher earnings in 2010, relatively to the domestic and ultimately foreign banks in Turkey.

Figure 13: Earnings of Domestic, MLS Foreign, and Ultimate Foreign Banks, scaled by total assets, (2006-2010)



Source: <http://www.bddk.gov.tr>, Financial Reports of Banks

4.4. OWNERSHIP AND CONTROL STRUCTURE IN TURKISH BANKS

The Turkish banking industry is comprised of a small number of banks, yet dominated by a few. Managerial ownership is not common, and thirteen out of twenty six commercial banks are publicly traded.

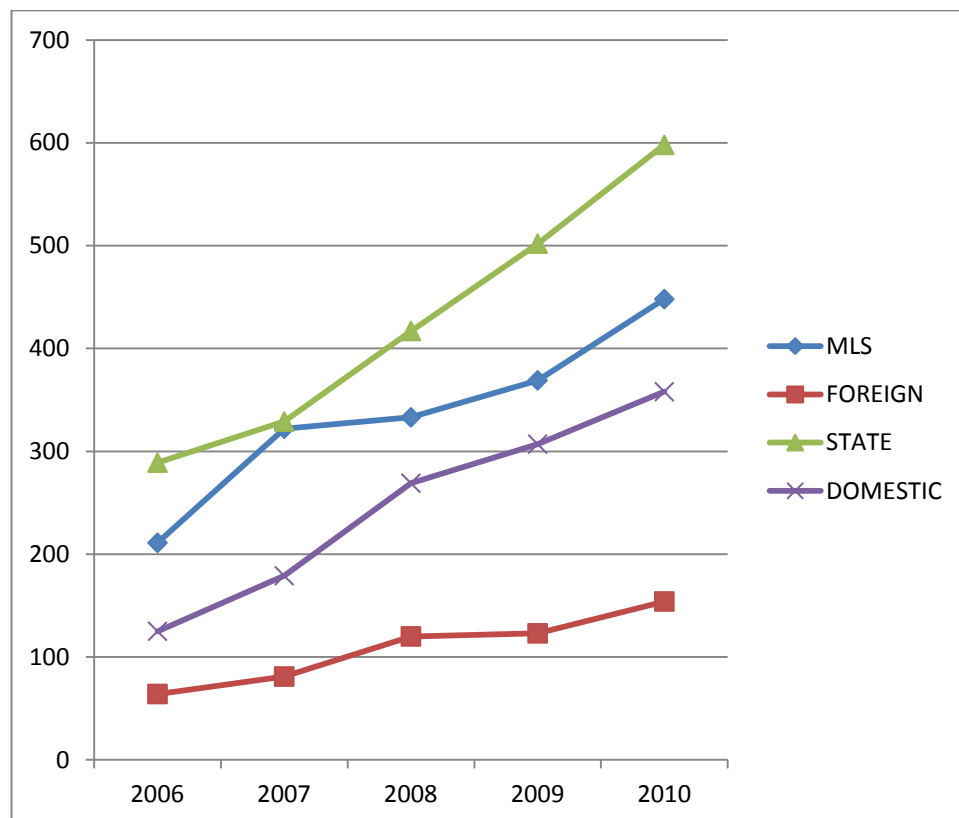
The shareholders are the state, domestic institutions, foreign institutions, and MLS that are domestic institutions sharing control with foreign institutions. Institutional ownership is common in Turkish banks and domestic institutional shareholders are mostly holding companies that are controlled by a family.

During the acquisition wave, foreign acquirer institutions were banks and financial institutions. Therefore, MLS ownership structure in Turkish banking

industry comprises of holding companies controlled by Turkish families that merge with foreign banks and financial institutions.

If we analyze the foreign ownership structure of Turkish banks after the substantial foreign acquisitions of 2006, we observe that the foreign shareholders rather to share control with domestic partners in Turkey, most likely due to the ease in the acquisitions of the domestic banks and the importance of domestic information. Banks that have foreign and domestic shareholders as MLS are the secondary most powerful players in Turkish banking industry in terms of assets (Figure 14).

Figure 14. Total Assets of Banks in Turkey by Ownership Structure, 2006-2010



Source: <http://www.tbb.org.tr/>

Table (7) shows the ownership and control structures of ten largest banks in Turkey in terms of asset size. Table (7) also reveals that foreign and domestic institutions share control as MLSs, and these collaborations are important players amongst Turkish banks.

Table 7: Ten largest banks in terms of Assets by 2010

| Rank | Banks | Asset Share | Ownership | Type of the Institution in Control |
|------|------------|-------------|-----------|------------------------------------|
| | | % | | |
| 1 | Ziraat | 15.7 | State | State |
| 2 | Is bank | 13.7 | Domestic | Domestic |
| 3 | Garanti | 12.9 | MLS | 26.7% Domestic 20.85% Foreign |
| 4 | Akbank | 11.8 | MLS | 40.74% Domestic 20% Foreign |
| 5 | Yapı Kredi | 8.8 | MLS | 40.9% Domestic 40.9% Foreign |
| 6 | Vakıflar | 7.7 | State | State |
| 7 | Halk | 7.6 | State | State |
| 8 | Finansbank | 4.0 | Foreign | Foreign |
| 9 | Denizbank | 2.9 | Foreign | Foreign |
| 10 | TEB | 2.0 | MLS | 42.1% Domestic 42.1% Foreign |
| | | | | |

Source: <http://www.bddk.gov.tr>, Financial Reports of Banks

4.5. FINANCIAL REPORTING ENVIRONMENT IN TURKISH BANKING SYSTEM

4.5.1 Accounting for Financial Instruments

In Turkey, banks and other financial institutions are required to prepare and present their financial statements that fully comply with the accounting requirements established by BRSA in accordance with Turkish Accounting Standards (TAS). TAS is in compliance with the IASs and IFRSs.

Regulation of BRSA on banks' financial reporting initiated with the "Regulation on Accounting Principles that is published in the Official Gazette dated 22.06.2002", and was in force until 2006.

Towards the end of 2005, the Banking Law Nr. 5411 stated that financial reporting of banks should be in compliance with TAS. Accordingly, "Regulation on the procedures and principles for accounting practices and retention of documents by banks" that is published in Official Gazette Nr. 26333 dated November 01, 2006, states that, banks recognize their operations in their accounting systems as enacted by BRSA. The operations are recognized under accounting records in line with the Turkish Accounting Standards (TAS) set by the Turkish Accounting Standards Board (TASB). However, procedures and principles governing recognition of operations by subsidiaries, jointly controlled partnerships and participations and arrangement of consolidated financial statements, financial statements for public disclosure and explanations and footnotes concerning them are established by communiqués to be enacted by BRSA. This regulation enters into force on the date of declaration.

In line with the regulation of 2006, accounting for financial instruments in Turkish banks is in pursuance of TAS 39, consequently IAS 39.

4.5.2 Loan Loss Provisioning in Turkish Banks

Loan loss provisions are strictly regulated in Turkish banking industry. For loan loss accounting, BRSA issued “Regulation on procedures and principles for the determination of qualifications of loans and other receivables by banks and provisions to be set aside” that was also published in the Official Gazette Nr. 26333 dated November 01, 2006. By this regulation, accounting treatment of loan loss provisions in Turkish banks differs from TAS 39, therefore IAS 39 (as described in Section 2.6.2) in several ways.

Article 4 of the regulation classifies loans and receivables into five groups which do not exist in IAS 39 that are: 1) Loans of a Standard Nature and Other Receivables; 2) Loans and Other Receivables Under Close Monitoring; 3) Loans and Other Receivables with Limited Recovery means; 4) Loans and Other Receivables with Suspicious Recovery; and 5) Loans and Other Receivables Having the Nature of Loss.

Article 4 also signifies the criterion of the classification as the recovery of credits and other receivables have delayed for the periods indicated in the definitions and explanations related to the groups. The respective periods are presented in Table (8). However, it is important to note that, according to the regulation, even if the periods indicated in the groups in connection with recovery of payments concerning loans and other receivables are not overdue, banks are allowed to classify their loans and other receivables under groups three, four and five by having due regard to the criteria and risk management principles laid down by the article 4 of the regulation.

Regulation sets the minimum loan loss provisions for groups three, four and five as 20%, 50%, and 100%, respectively.

Other than loan loss provisions, the loans are also due to general provisions in Article 7 as demonstrated in Table (8). The banks distribute general provisions at a rate of one per cent (1%) of the total sum of cash credits, and (0.2 %) of the total sum of guarantee letters, sureties and other non-cash loans for group one; at a rate of two percent (2%) of the total cash loans and four per thousand (0.4%) of the total sum of guarantee letters, sureties and other non-cash loans for group two.

Table 8: The Classification of Loans and Receivables as enacted by BRSA

| Group | Criteria ^a | Overdue days | Loan Loss Provisions Minimum | General Provisions |
|-------|--|-----------------|---------------------------------|---|
| 1 | No repayment problems are expected in the future and which are totally recoverable or collectable, no deterioration in creditworthiness | <30 | --- | 1% for cash loans, 0.2% for non-cash loans |
| 2 | Negative trends in debtors' payment capability or cash flow positions or expectations for occurrence of such things or the fact that credit users face substantial financial risks | 30-90 | --- | 2% for cash loans, 0.4% for non-cash loans |
| 3 | Debtors have suffered deterioration in their creditworthiness and credits have suffered weakness consequently | 90-180 | 20% | --- |
| 4 | Repayment or liquidation is not considered likely | 180-365 | 50% | --- |
| 5 | Belief that recovery is not possible | >365 | 100% | --- |
| | | | | |

Source: BRSA Regulation on procedures and principles for the determination of qualifications of loans and other receivables by banks and provisions to be set aside, Article 4 - 7, Official Gazette Nr. 26333 dated November 01, 2006.

^a: Criteria for the group classification is summarized in this Table. The detailed descriptions may be found in the source.

4.6. EARNINGS MANAGEMENT PRACTICES OF TURKISH BANKS

As far as detected, although literature provides substantial evidence on the performance and efficiency of Turkish banks, evidence on the EM practices is limited to a few cross country evidence (e.g. Karagetnetnam et al., 2010; Curcio, 2008). However, it is not possible to distinguish Turkish banks' EM practices due to the pooled data in these studies. Literature that is focused on EM in Turkish companies on the other hand, excludes financial institutions from their samples.

Exceptionally, Shen and Chih (2005: 2683) present evidence of EM to exceed thresholds of banks from 48 countries for 1993-1999 period, including Turkish banks. Using the graphical distributions of annual net income, their results show that Turkish banks and commonly banks in most of the countries, manage earnings to avoid losses.

This chapter reveals the importance of the year 2006 for Turkish banking industry. The regulatory actions of BRSA and foreign entry were the two main developments in 2006.

The timely efforts of BRSA prepared the banking system to the global financial crises started in 2007, the profitability decreased, however, the capital and liquidity adequacy requirements protected the sector.

This chapter also shows that although foreign entry is criticized, no evidence is detected on the effect of foreign shareholders on agency costs of Turkish banks.

The following chapter will present the research design of the study based on the research reviewed.

CHAPTER FIVE

RESEARCH DESIGN

5. 1. HYPOTHESES DEVELOPMENT

Based on the research objectives and questions of the study, and in light of the literature reviewed in the previous sections, this section develops the hypotheses of the thesis.

As Dechow and Skinner (2000: 248) suggest, to beat a specific threshold is one of main incentives of earnings management. According to Burgstahler and Dichev (1997: 101), managers opportunistically avoid reporting losses to decrease the costs imposed in transactions with stakeholders, assuming that stakeholder decisions are often based on heuristic cutoffs at zero changes or levels of earnings.

In case of banking industry, Shen and Chih (2005: 2678) point out that bank have stronger incentives to avoid reporting losses in order to keep depositors from losing confidence and Bornemann (2010: 5) signify that reporting losses may lead doubts about the economic soundness of banks within the society. Stolowy et al (2004)'s framework for EM incentives may also explain why reporting positive profits is crucial specifically for the banking industry, since wealth transfers between the banks and the society differs from the other industries.

In case of Turkish banking industry, Shen and Chih (2005: 2675) present evidence of EM to exceed thresholds of banks from 48 countries for 1993-1999 period, including Turkish banks and show that Turkish banks and commonly banks in most of the countries, manage earnings to avoid losses. Additionally, although the continuous regulation process of BRSA led to a more stable banking system, the disparity of the profits and the recent public scrutiny of bank performances in Turkey after the severe experiences in banking crises and the recent global financial crisis may have caused the bank managers to manage earnings to avoid losses.

Therefore, regarding the first research question of "Do Turkish banks manage earnings?" hypothesis one is developed as:

H1: Turkish banks manage earnings to avoid losses

Research determines two main tools that bank managers use to manage earnings that are the strategic timing of realized gains and losses and/or altering LLP. Beatty (1995), Beatty et al (1995), Zhang and Mei (2010), and Laux (2011) point out that the discretion on the classification of investment securities as AFS at FVTOCI creates an opportunity of influencing reported earnings through the recognition of gains on security sales for banks and it is a relatively unregulated and unaudited discretionary choice comparing to LLP.

Moreover, in case of Turkish banking industry, the downward trend of the interest rates and fair valuations of investment securities that are dominated by Treasury bills and bonds generated profits for banks during the period of 2006-2010, and it is observed that the proportion of fair value through profit or loss category in total assets of banks diminished from eight to four percent, while available for sale securities maintained at eleven percent. The realized or unrealized profits of fair value through profit or loss category are recognized in net income of Turkish banks under the rules of IAS 39. Though the unrealized profits of available for sale category is not recognized in net income until they are realized. The fall in interest rates may have widened the window of opportunity of managing earnings by timing the realized security gain and losses of available for sale securities.

Accounting research provides substantial evidence on the discretionary use of LLP (Collins et al 1995; Ahmet et al 1999; Anandarajan 2007). However, according to the findings, income smoothing with LLP vary across countries due to the institutional and regulatory differences; financial structure, and development. Fonseca and Gonzales (2008) found a positive relationship of EM and market-orientation and the development of the financial system, whereas a negative relationship of EM with regulatory restrictions. These findings reveal that earnings smoothing through LLP increases in countries with more developed financial systems. Turkey is an emerging country with a bank based financial system. Loan loss provisions are strictly regulated in Turkish banking industry.

Therefore, regarding the first research question of “Do Turkish banks manage earnings through Available for Sale Securities?” and “Do Turkish banks manage earnings through Loan Loss Provisions?” the hypotheses are developed as follows.

H2a: AFS category is positively related to EM

H2b: LLP is not related to EM

Regarding the research question that ownership structures that constrain/enhance the EM practices of banks, literature provides limited evidence. However, the existence of public ownership in banks is investigated thoroughly. Yet, international evidence and US based research does not show the same results. US based evidence (Beatty and Harris 1999; Beatty et al 2002; Beaver et al 2003) report that publicly held banks engage in more EM than private banks due to the focus on the share prices and their more dispersed shareholdings that lead to more incentives to manage earnings relative to those of private firms.

However in other countries, listing status may not reflect dispersed ownership and publicly held banks may still have large and concentrated owners in bank based countries. Biurrun et al (2010: 11) analyzed banks from 47 countries over the period of 1990 and 2006 and found no difference in EM behavior of public versus private banks. Single-country based evidence is needed to answer whether public ownership itself generates incentives to manage earnings when there are also large controlling shareholders in banks.

Although a bank based country, in Turkey, thirteen out of twenty six banks are publicly held and these bank shares are the largest in trading volume in Istanbul Stock Exchange. In 2009, when the public scrutiny of bank performances was higher, first three most traded shares belonged to banks. For Turkey because of the emphasize of banks in Istanbul Stock Exchange, the focus on the share prices may lead to more incentives to manage earnings, therefore hypothesis three is developed as follows.

H3: The existence of public ownership enhances EM practices of Turkish banks

From a ‘Berle and Means’ point of view, literature suggests that foreign institutional ownership might provide better monitoring in firms and mitigate EM practices due to their long term orientated investments and expertise (e.g. Seasholes, 2004, Farooq and Jai, 2012). This stream also suggests that foreign shareholders from common law countries have technological advantages.

Another stream argue that foreigners have an information disadvantage compared to domestic firms caused by the geographical and cultural distance and emerging countries in particular provide lower amount of publicly available information that leads to a higher information asymmetry between domestic and foreign shareholders. (Ramaswamy and Li 2001; Frenkel and Menkoff, 2004). Some studies found that this additional information asymmetry also leads to more EM (Chen et al., 2007; Berger et al., 2001). Frenkel and Menkoff (2004: 1280) argue that the more important the local knowledge is the less effective the expertise and technological advantages. And if the presence of foreigners is politically acceptable in the country’s banking system, because of external sources of capital, existing information asymmetries may be reduced.

Nevertheless, concentrated foreign ownership may create a trade-off. As Shleifer and Vishny (1997: 754-758) point out, although ownership concentration is an important corporate governance mechanism in bank based countries, it creates a trade-off. The large shareholders with controlling rights monitor the managers in favor of minority shareholders. However, they may also entrench by pursuing their private goals that differ from profit maximization and may be harmful to minority shareholders (Maury and Pajuste, 2005: 1814).

Throughout the period 2006-2010, banks recorded high performances, however due to the liquidity crises in their home countries and risk averse behavior of Turkish investors (Karabiyik and Gokmen, 2012: 40), the performances of ultimately foreign banks were lower which may generate more incentives to manage earnings to gain the confidence of the depositors. Thus the following hypothesis is developed.

H4a: EM is more pronounced for Turkish banks that have foreign shareholders as ultimate controllers.

From a Shleifer and Vishny point of view, there is substantial evidence that the MLS mitigate EM, by monitoring the controlling shareholder (Shleifer and Vishny, 1997; La Porta et al., 1999; Maury and Pajuste 2005; Boubaker and Sami 2011). Gomes and Novaes (2000: 33) suggest that MLS “should” be present in the favor of minority shareholders particularly in firms with large costs of diluting minority shareholders, and large financing requirements.

Maury and Pajuste (2005), Cronqvist and Fahlenbrach (2007), Attig et al. (2008), and Trainer (2011) signify one other trade-off of the costs and the benefits of MLS ownership structure that depend on the type of the large shareholders. Some MLS may collude with the controller and deepen the agency problem with the minority shareholders, whereas other MLS may be more effective monitors. If large shareholders that form MLS are all family-controlled firms, this ownership structure is negatively related to firm value. However, if the family-controlled firm has a second large shareholder as a financial institution, this ownership structure is positively related to firm value, if one of the large shareholders is the State the agency costs are mitigated. Therefore, the incentives to collude with or to monitor the controlling shareholder are affected by the type of the shareholders and their heterogeneity. Consistently, Trainer (2011: 37) finds that in MLS ownership structure, the more heterogeneous the large shareholders are, the less EM.

In Turkish banking industry, foreign institutions are either concentrated ultimate controllers, or they share control with domestic institutions forming MLS ownership structure. Regarding to large shareholder heterogeneity, MLS ownership structure in Turkish banking industry comprises of holding companies controlled by Turkish families that merge with foreign banks and financial institutions. According to the findings of Maury and Pajuste (2005), Cronqvist and Fahlenbrach (2007), Attig et al. (2008), and Trainer (2011), heterogeneity is higher in MLS banks since a “foreign-domestic” division is added. In addition, banks are highly leveraged institutions that optimum ownership structure requires MLS (Gomes and Novaes, 2000: 33). Moreover Karabiyik and Gokmen (2012: 50) point out that MLS banks are generally not perceived as foreigners by Turkish public. Therefore, the following hypothesis is developed.

H4b: MLS ownership structure with foreign and domestic large shareholders constrain EM practices of Turkish banks

5.2. RESEARCH DATA

Data includes all the deposit banks that are founded in Turkey, and in operation during the period of 2006 – 2010, with 26 banks and 130 observations.

The financial and ownership variables in this study are obtained from the annual reports provided by the Bank Association of Turkey (BAT) and from the web pages of the BAT and Istanbul Stock Exchange.

During the sample period, although there have been changes in the titles of the deposit banks due to the foreign acquisitions, as shown in Table (5); the number of the deposit banks remained unchanged as 26 banks. Therefore, the data consist of 130 observations.

Literature widely use homogenous data in analyzing banking industry in the form of deposit banks only, hence exclude export-import banks, branches of foreign banks, government development banks, and cooperative banks from the sample to report more meaningful results (e.g. Anandarajan et al., 2007; Leventis et al., 2010; Gebhardt and Farkas, 2010). Accordingly, the banks in the sample solely are deposit banks that consist of state, private, and foreign banks. The sample is generated as illustrated in Table (9).

Table 9 also shows the sector shares of sample banks in Turkish banking system in terms of assets, loans, and deposits for 2010. Sample banks represent 96.2 % of total asset share, 95.9% of total loan share, and 99.7 % of deposit share in Turkish banking system.

Table 9: Sample Generation

| Filter | Years | | | | | Sector Shares (%) for 2010 | | |
|---|-------|------|------|------|------|----------------------------|------------|---------------|
| | 2010 | 2009 | 2008 | 2007 | 2006 | Asset Share | Loan Share | Deposit Share |
| Banks | | | | | | | | |
| Banking System in Turkey | 45 | 45 | 45 | 46 | 46 | 100 | 100 | 100 |
| Foreign Banks Having Branches | 6 | 6 | 6 | 7 | 7 | 0.6 | 0.4 | 0.3 |
| Development and Investment Banks | 13 | 13 | 13 | 13 | 13 | 3.2 | 3.7 | 0 |
| Remaining Sample- Deposit Banks (State, Private, and Foreign Deposit Banks) | 26 | 26 | 26 | 26 | 26 | 96.2 | 95.9 | 99.7 |
| | | | | | | | | |

Source: http://www.tbb.org.tr/eng/Banka_ve_Sektor_Bilgileri/banka_listesi.asp?tarih=31.12.2006, http://www.tbb.org.tr/eng/Banka_ve_Sektor_Bilgileri/banka_listesi.asp?tarih=31.12.2007, http://www.tbb.org.tr/eng/Banka_ve_Sektor_Bilgileri/banka_listesi.asp?tarih=31.12.2008, http://www.tbb.org.tr/eng/Banka_ve_Sektor_Bilgileri/banka_listesi.asp?tarih=31.12.2009, http://www.tbb.org.tr/eng/Banka_ve_Sektor_Bilgileri/banka_listesi.asp?tarih=31.12.2010.

5.3. METHODOLOGY

This study applies threshold and specific accrual approaches to measure bank EM, since bank's financial reporting environments differ from those of industrial firms and they have fundamentally different accrual processes that are not likely to be captured well by total accrual models (Peasnell et al., 2000: 318).

The frequencies of small positive net income and the relation of LLPs and earnings (before LLPs) are used as metrics of earnings management.

5.3.1. Graphical and Statistical Evidence

First, the validity of earnings management is examined for Turkish banks. For the detection of earnings management, the frequency distribution approach and threshold driven earnings management methodology (Burgstahler and Dichev., 1997; Degeorge et al., 1999; Beatty et al., 2002) is followed that predicts discontinuities in earnings distributions at specific values. Following Beatty et.al. (2002: 550-551), the interval widths of the histograms are calculated as twice the bin width of the histogram of the earnings distribution. Degeorge et al. (1999: 18) indicates that bin width should be positively related to the variability of the data and negatively related to the number of observations and may be calculated as the twice the interquartile range of the variable multiplied by the negative cube root of the sample as shown in equation 1.

$$(eq. 1) \quad \text{Bin width: } 2(IQR) n^{-1/3}$$

Where;

IQR = Sample interquartile range

n = the number of available observations.

The frequency of reporting small positive net income is a metric to provide evidence on managing towards positive earnings (Barth et. al., 2008: 476-477). For the zero threshold (loss aversion) of discontinuities in earnings distributions, the

frequency of the small positive net income is analyzed. Net income is scaled by end-of-year total assets (ERN) as Leuz et al. (2003), Barth et al. (2008), and Fazeli and Rasouli (2011).

Considering the criticisms of Dechow et al. (2003: 356) for the threshold approach that the discontinuity around zero may not indicate earnings management, the threshold driven methodology is used to create the suspected group (EM) and high earnings group (HE). According to the criticisms, the discontinuity in the frequency distribution should be associated with the main earnings management tools of banks significantly. These univariate comparisons suggest that the positive associations between discretionary accrual measures and earnings extend to other earnings bins not centered on the zero profit benchmark (Ayers et al., 2006: 618). Therefore, if this association exists in the EM group, however does not exist for the HE group, than H_1 should be accepted.

Next, for the statistical evidence, we test the null hypothesis of no earnings management in Turkish banking industry, which suggests that the distributions of earnings levels and changes are smooth; therefore the expected number of observations in any given interval of the distribution is the average of the number of observations in the two immediately adjacent intervals (Shen and Chih, 2005: 2684). I follow Burgstahler and Dichev (1997) and Shen and Chih (2005) and define EM2 as eq. (2), the difference between the actual and expected number of observations for the interval immediately to the right of zero:

$$(eq. 2) \quad EM2 = (AQ_i - EQ_i) / SD_i$$

Where;

AQ_i = Actual number of observations in interval i (the first interval on the right of zero)

EQ_i = Expected number of observations in interval i (the average of the number of observations in the two immediately adjacent intervals)

SD_i = estimated standard deviation of the difference between the actual and expected numbers of observations around interval I as estimated by eq. (3).

$$(eq. 3) \quad SD_i = [Np_i(1 - p_i) + (1/4)N(p_{i-1} + p_{i+1})(1 - p_{i-1} - p_{i+1})]^{1/2},$$

Where;

N = bank-years

p_i = the proportion of the actual number of observations for interval i to the bank-years;

Additionally, to measure EM, the ratio of the frequency of small profits to small losses is computed (Burgstahler and Dichev, 1997; Leuz et al., 2003; Shen and Chih, 2005) as EM3, that shows the extent to which insiders manage earnings to avoid reporting losses (Leuz et al., 2003: 511). If greater than unity, the ratio of small profits to small losses indicates EM, and higher ratios signify more EM (Shen and Chih, 2005: 2685).

5.3.2. Research Model

To test H1, H2a, and H2b, that are the associations of AFS classification, timing of realized gains, and LLP with suspected EM group, the following probit model is developed as shown in equations (4) and (5), using the threshold driven EM methodology following Burgstahler and Dichev (1997), Beatty et al (2002), Leuz et al (2003), and Shen and Chih (2005).

The dependent variable of the model is a dichotomous variable indicating whether the observation is in the EM suspect group or not. Since the dependent variable is dichotomous, probit and logit models may be applied (Maddala, 1991: 789-790). Accounting research that analyzes the threshold driven EM mainly applies probit models in preference to logit models (e.g. Beatty et al. 2002: 551). According to Hamilton et al. (1977: 714) “*it is difficult to choose between the logit and probit models. If the true response curve is closely approximated by one model, it probably is closely approximated by the other*”.

As stated by Kucukkocaoglu et al. (1997: 6), “*Probit analysis is a method of regression analysis that is convenient for dependent variables as M_i ; dual variable; value is 1 for manipulators, 0 for control companies*”.

In this study a probit model is applied however, it is important to note here that the results are robust for the use of either probit or logit models.

The probit model is as expressed by Beneish (1997: 282):

$$M_i = \beta'x_i + \hat{\epsilon}_i$$

Where;

M = a dichotomous variable coded 1 for the suspect group (GAAP violators in Beneish (1997: 282)'s model) and 0 otherwise;

X = the matrix of explanatory variables, and

$\hat{\epsilon}$ = a vector of mean zero independent and identically normally distributed residuals.

The research model is expressed in Eq. (4) as the dichotomous dependent variable shows whether the observation is in the suspect (EM) group or not. In eq. (5) however, the dichotomous dependent variable shows whether the observation is in the high earnings group or not. Observations take value of “1” for the EM group, but all other observations (negative or positive, indicating bank year observations that reported profits and losses) are coded “0” in Eq. (4). Therefore the number of observations coded “0” for eq. (4), are not equal to the number of observations that are coded “1” in the eq. (5).

$$\begin{aligned}
 \text{(eq.4) } EMI_{i,t} &= \alpha_{i,t} \\
 &+ \beta_1 (\text{Indicators of Asset Classification Measured at fair value})_{it} \\
 &+ \beta_2 (\text{Fair Value Income Variables})_{it} \\
 &+ \beta_3 (LLP)_{it} \\
 &+ \beta_4 (\text{Bank Specific Control Variables})_{it} \\
 &+ \beta_5 (\text{Macroeconomic Control Variable})_{it} \\
 &+ \epsilon_{it}
 \end{aligned}$$

$$\begin{aligned}
\text{(eq.5) } HE_{i,t} &= \alpha_{i,t} \\
&+ \beta_1 (\text{Indicators of Asset Classification Measured at fair value})_{it} \\
&+ \beta_2 (\text{Fair Value Income Variables})_{it} \\
&+ \beta_3 (LLP)_{it} \\
&+ \beta_4 (\text{Bank Specific Control Variables})_{it} \\
&+ \beta_5 (\text{Macroeconomic Control Variable})_{it} \\
&+ \varepsilon_{it}
\end{aligned}$$

Where,

EM1 = dummy variable, taking the value 1 if the observation is in the EM suspect group and 0 otherwise;

HE = dummy variable taking the value 1 if the observation is in the HE group, and 0 otherwise.

For evidence on H4a and H4b, the following model is developed (eq. 6) to test whether foreign ownership variables enhance/constrain EM.

$$\begin{aligned}
\text{(eq.6) } EMI_{i,t} &= \alpha_{i,t} \\
&+ \beta_1 (\text{Indicators of Asset Classification Measured at fair value})_{it} \\
&+ \beta_2 (\text{Fair Value Income Variables})_{it} \\
&+ \beta_3 (LLP)_{it} \\
&+ \beta_4 (\text{Foreign Ownership Variables})_{it} \\
&+ \beta_5 (\text{Public Ownership Variable})_{it} \\
&+ \beta_6 (\text{Indicators of Asset Classification Measured at FV * Foreign Ownership Variables})_{it} \\
&+ \beta_7 (\text{Bank Specific Control Variables})_{it} \\
&+ \beta_8 (\text{Macroeconomic Control Variable})_{it}
\end{aligned}$$

+ ε_{it}

Where,

EM1 = dummy variable, taking the value 1 if the observation is in the EM suspect group and 0 otherwise;

5.3.3. Independent Variables of the Research Model

Indicators of asset classification measured at fair value are AFS and FVTPL. Following Livne et. al. (2011: 1100), the fair valued financial assets are separated as FVTPL and AFS securities, because they reflect underlying differences in both intent and in the business context in which positions are held. AFS variable is the end-of year balance of AFS securities measured at FVTOCI scaled by total assets. FVTPL is the end-of year balance of trading securities measured at FVTPL scaled by total assets.

H1 predicts that AFS category is positively related to EM. Since Beatty (1995), Beatty et al (1995), Zhang and Mei (2010), and Laux (2011) point out that the discretion on the classification of investment securities as AFS at FVTOCI creates an opportunity of influencing reported earnings through the recognition of gains on security sales for banks, classification of AFS securities is discretionary and related to bank EM practices. Therefore, a positive coefficient is expected for the AFS variable for (eq.4), and a negative coefficient is expected for the FVTPL variable.

Fair value income variables are AFSGAIN and AFSLOSS. Barth et al. (2011) found that banks use AFS securities to manage earnings by selling AFS securities with unrealized gains and holding on to AFS securities with unrealized losses. Therefore two dummy variables are generated to test this relation.

AFSGAIN is a dummy variable, taking the value 1 if the total amount of realized AFS gains/losses transferred to net income is positive and 0 otherwise. A

positive coefficient is expected for the AFSGAIN variable since it represents the realized gains on AFS securities.

AFSLOSS is a dummy variable, taking the value 1 if the total amount of realized AFS gains/losses transferred to net income is negative and 0 otherwise. A negative coefficient is expected for the AFSLOSS variable since it represents the realized losses on AFS securities.

According to the criticisms of Dechow (2003: 356) for the threshold approach, the discontinuity in the frequency distribution should be associated with the main earnings management tools of banks significantly. These univariate comparisons suggest that the positive associations between discretionary accrual measures and earnings extend to other earnings bins not centered on the zero profit benchmark (Ayers et al 2006: 618). Therefore, if the predicted associations exist in the EM group however does not exist or exist in reverse for the HE group, than H_1 should be accepted.

LLP variable is LLP scaled by total assets. Since H2b predicts that LLP is not related to EM no prediction is assigned to LLP.

Foreign ownership variables are ULTIMATE and MLS. MLS is a dummy variable, taking the value 1 if the bank has equity held by foreign shareholders, with other large domestic shareholders, and 0 otherwise; ULTIMATE is a dummy variable, taking the value 1 if the bank has equity held by foreign shareholders as ultimate owners, and 0 otherwise. A positive coefficient is expected for ULTIMATE and interaction variables with ULTIMATE. A negative coefficient is expected for MLS and interaction variables with MLS.

Public ownership variable is LISTED. H3 predicts that the existence of public ownership enhances EM practices of Turkish banks. Therefore a positive coefficient is expected for LISTED variable.

To control for the changes in the other characteristics of banks, Beatty et al (2002) is followed, and the control variables that present bank size as natural log of total assets (LNASSETS), asset growth as the first difference in total assets, divided by total assets at the end of the previous year (Δ ASSETS), and profitability as cash flow from operations scaled by total assets (CFO) are used with no predictions.

Other control variables are capital adequacy (CAR) and difference in liquidity (Δ LIQUID) to control for the changes in capital adequacy and liquidity of banks due to the regulations of 2006, and also to control for the effects of the global financial crisis. CAR is capital adequacy ratio of banks that is the shareholders equity divided by Amount Subject to Credit Risk + Amount Subject to Market Risk + Amount Subject to Operational Risk. Δ LIQUID is the first difference in liquid assets (Cash and Balances with the Central Bank of Turkey + Trading Securities + Banks and Other Financial Institutions + Money Market Securities + Investment Securities Available for Sale (Net) + Reserve Deposits) as a percentage of total assets.

The macroeconomic control variable Δ GDP is a proxy for the change in economic growth and it is the annual growth rate of Gross Domestic Product per capita. Δ GDP is added to the control set following Anandarajan (2007), and Leventis et al. (2010). Duvan and Yurdoglu (2004: 114) found that provisions depend negatively on GDP growth in Turkey, thus the coefficient of Δ GDP is expected to be negative.

Independent Variables of the research model are presented in Table 10.

Table 10: Variable Descriptions

| Variables |
|---|
| <i>Indicators of Asset Classification Measured at FV</i> |
| AFS: End-of year balance of AFS securities measured at FVTOCI scaled by total assets; |
| FVTPL: End-of year balance of trading securities measured at FVTPL scaled by total assets; |
| <i>Fair Value Income Variables</i> |
| AFSGAIN: Dummy variable, taking the value 1 if the total amount of realized AFS gains/losses transferred to net income is positive ,and 0 otherwise; |
| AFSLOSS: Dummy variable, taking the value 1 if the total amount of realized AFS gains/losses transferred to net income is negative ,and 0 otherwise; |
| <i>LLP : LLP scaled by total assets</i> |
| <i>Ownership Variables</i> |
| LISTED: dummy variable, taking the value 1 if the bank is publicly traded, and 0 otherwise; |
| MLS: dummy variable, taking the value 1 if the bank has equity held by foreign shareholders, with other large domestic shareholders, and 0 otherwise; |
| ULTIMATE: dummy variable, taking the value 1 if the bank has equity held by foreign shareholders as ultimate owners , and 0 otherwise; |
| <i>Bank Specific Control Variables</i> |
| LNASSETS: natural log of total assets; |
| Δ ASSETS: first difference in total assets, divided by total assets at the end of the previous year; |
| CAR: Capital Adequacy Ratio, shareholders equity divided by Amount Subject to Credit Risk + Amount Subject to Market Risk + Amount Subject to Operational Risk |
| CFO: first difference in cash flows, scaled by total assets; |
| Δ LIQUID: first difference in the liquidity ratio, calculated as the liquid assets (Cash and Balances with the Central Bank of Turkey + Trading Securities (Net) + Banks and Other Financial Institutions + Money Market Securities + Investment Securities Available for Sale (Net) + Reserve Deposits) as a percentage of total assets |
| Δ GDP: annual growth rate of Gross Domestic Product per capita. |

5.3.4. Specific Accrual Model

For additional evidence on H2b, H4a, and H4b, specific accrual methodology is applied. To measure earnings smoothing, Ahmed et al. (1999), Anandarajan (2007), and Leventis et al. (2010) are followed and the relation between loan loss provisions (LLP) and earnings before taxes and LLP (EBT) is analyzed as shown in equation 8.

$$\begin{aligned} (eq.8) \quad LLP &= \alpha_{i,t} \\ &+ \beta_1 (EBT - \text{earnings before taxes and LLP scaled by} \\ &\quad \text{total assets})_{it} \\ &+ \beta_2 (\text{Bank Specific Control Variables})_{it} \\ &+ \beta_3 (\text{Foreign Ownership Variables})_i \\ &+ \beta_4 (EBT * \text{Foreign Ownership Variables})_i \\ &+ \beta_5 (\text{Macroeconomic Control Variable})_{it} \\ &+ \varepsilon_{it} \end{aligned}$$

In this model, the increase of LLP does not indicate EM, however EM is the positive relationship of EBT and LLP variables. Therefore, the interaction variables are generated accordingly.

CHAPTER 6

RESEARCH FINDINGS

6.1. DESCRIPTIVE STATISTICS

Table 11 shows the summary statistics of the explanatory variables. 12% of the assets of MLS group are AFS, whereas 4% is FVTPL category. AFS of MLS group is higher and FVTPL category is lower than ULTIMATE. Banks in the ULTIMATE group evenly distributes financial assets as AFS and FVTPL and has higher CAR. MLS group has higher assets. Δ LIQUID is negative for both groups.

According to Table 11, MLS and ULTIMATE groups show difference in the classification of financial assets. MLS holds more AFS securities in their investment portfolio. Since there is substantial decline in the profitability by 2010, the descriptive statistics for 2009 and 2010 are also provided in the Table as well. This information shows that MLS continues to increase AFS securities in investment portfolios, however there is a decline for the ULTIMATE group.

It is interesting that for all the other variables, increases and decreases are matched except AFS securities. This might be due to the realized AFS profits of ULTIMATE group due to the decreased profits.

Table 11: Summary Statistics of Explanatory Variables

| Variables ^a | MLS | | ULTIMATE | | SAMPLE | | MLS | | ULTIMATE | |
|------------------------|----------|-----------|----------|-----------|----------|-----------|--------------|--------------|--------------|--------------|
| | Mean | Std. Dev. | Mean | Std. Dev. | Mean | Std. Dev. | 2009 Mean | 2010 Mean | 2009 Mean | 2010 Mean |
| AFS | .123328 | .097466 | .0913946 | .0697067 | .1076907 | .096579 | .1314 | .1484 | .118 | .098 |
| FVTPL | .0410175 | .0699459 | .0979375 | .1727676 | .0688284 | .1473405 | .046 | .035 | .092 | .053 |
| LLP | .008 | .006 | .007 | .0084 | .007 | .0066 | .011 | .005 | .017 | .006 |
| LNASSETS | 16.24351 | 1.847727 | 15.71432 | 1.29 | 15.77 | 1.950005 | 16.27 | 16.44 | 15.66 | 15.86 |
| ΔASSETS | .2724324 | .2592742 | .3076 | .4851 | .2309 | .3339602 | .1264 | .1837 | .19 | .238 |
| CAR | 19.93243 | 6.458158 | 21.02432 | .1284 | 28.53769 | 36.65581 | 22.74 | 19.67 | 21.56 | 20.02 |
| CFO | .0315103 | .0808158 | .00474 | .0489709 | .0489 | .1811022 | .069 | -.013 | .026 | .09 |
| ΔLIQUID | -1.6099 | 7.494897 | -.2884 | 10.36 | -.9347 | 9.057079 | 4.61 | -1.78 | 6.033 | .64 |

^aMLS: dummy variable, taking the value 1 if the bank has equity held by foreign shareholders, with other large domestic shareholders; ULTIMATE: dummy variable, taking the value 1 if the bank has equity held by foreign shareholders as ultimate owners; AFS:End-of year balance of AFS securities measured at FVTOCI scaled by total assets; FVTPL: End-of year balance of trading securities measured at FVTPL scaled by total assets; LLP: LLP scaled by total assets; LNASSETS: natural log of total assets; ΔASSETS: first difference in total assets, divided by total assets at the end of the previous year; CAR: Capital Adequacy Ratio, shareholders equity divided by Amount Subject to Credit Risk + Amount Subject to Market Risk + Amount Subject to Operational Risk; CFO: cash flows, scaled by total assets; ΔLIQUID: first difference in liquid assets (Cash and Balances with the Central Bank of Turkey + Trading Securities + Banks and Other Financial Institutions + Money Market Securities + Investment Securities Available for Sale (Net) + Reserve Deposits) as a percentage of total assets.

6.2. GRAPHICAL DISTRIBUTION OF EARNINGS AND STATISTICAL EVIDENCE

Figure (14) shows the earnings distributions of Turkish banks for the period 2006-2010. According to Figure 15, Turkish banks report small declines in earnings changes less often than small increases in earnings. The percentages of the distributions just before and after zero according to the calculated interval widths are 3.85% and 46.15% for ERN. Therefore, 46.15% of the observations set the suspect group for earnings management. In the aim of comparison with the period prior 2006, ERN distribution is also presented in Figure (15).

The result of the statistical analysis is reported in Table (12) for EM2 and EM3. Results show that small positive earnings and small increases in earnings are significantly higher than expected indicating EM to exceed zero and sustain recent performance thresholds respectively.

Figure 15: Zero Threshold/Loss Aversion: ERN distribution for Turkish Banks, 2006-2010, (%)

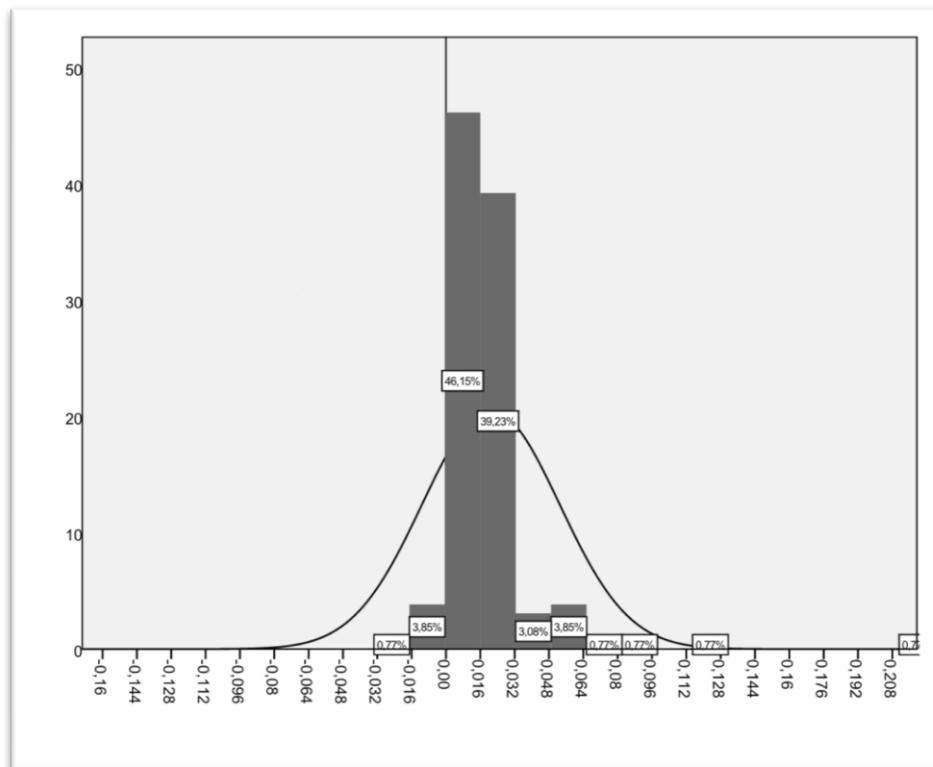


Table 12: Statistical Analysis

| | EM2 | EM3 |
|-----|------------|-----|
| ERN | 5,0422**** | 12 |

**** p < .001

6.3. RESULTS OF THE PROBIT ANALYSIS

Table 13 reports the results of the Probit Analysis for Zero Threshold, Small Positive Earnings Group (EM). Firstly, the model is run with the control set solely. Results show that LNASSETS and CAR is significantly negatively related with suspect group EM suggesting that higher bank size and capital adequacy leads to lower incentives to manage earnings. The second model introduces AFS and FVTPL variables. AFS variable has positive significant, whereas FVTPL has negative significant coefficients. For H1 and H2a, the results show that the higher proportions of investment securities classified as AFS are significantly and positively related with reporting small positive earnings to exceed 0 threshold. In model 3, listed variable is added as an independent variable, and it has a positive significant coefficient at ten percent. AFSGAIN variable is also positively related to EM in the forth model, whereas the fifth model reveals that AFSLOSS variable has no significance. These findings provide support to H1 and H2a and existing literature, and also for H2b since LLP variable is not significant for all models. According to Table (13), Turkish banks manage earnings to avoid losses since the suspected category of EM is positively related to AFS and AFSGAIN variables. In these models, weak evidence is found for H3. In the models, if two dummy variables are used as LISTED and AFSGAIN, solely AFSGAIN is significant. LISTED variable is positive significant for models four and six.

Table (14) reports the results of the Probit Analysis for Zero Threshold for the High Earnings Group (HE). To face the critics of threshold approach, AFS variable should not be positive significant for HE group. According to the results, AFS variable is negative significant for this group. In other words, investment securities

classified as AFS are significantly and negatively related with reporting high earnings. AFSGAIN variable also loses significance in HE group. Therefore, if AFS and AFSGAIN variable are not significant for the group that has no incentives to beat zero (because already bet), banks engage in gains trading through AFS securities, not LLP to beat the zero threshold.

Table 13: Results of the Probit Analysis for Zero Threshold, Small Positive Earnings Group (EM)

| Variables ^a | Pred. | Dependent Variable: EM | | | | | | |
|------------------------|-------|------------------------|----------|----------|----------|----------|----------|----------|
| | | Coefficients | | | | | | |
| | | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
| AFS | + | ---- | 5.35*** | 5.65*** | 6.33*** | 5.37*** | 6.08*** | 5.09*** |
| FVTPL | - | ---- | -2.14* | -1.86 | -1.81 | -1.74 | -1.97 | -1.93 |
| LLP | | ---- | ---- | 2.68 | -3.41 | 2.71 | 5.23 | 12.62 |
| LISTED | + | ---- | ---- | .58* | .54 | .58* | ---- | ---- |
| AFSGAIN | + | ---- | ---- | ---- | .57* | ---- | .60** | ---- |
| AFSLOSS | - | ---- | ---- | ---- | ---- | .14 | ---- | .13 |
| LNASSETS | | -.31**** | -.57**** | -.68**** | -.77**** | -.68**** | -.67**** | -.57**** |
| ΔASSETS | | .21 | .70 | .63 | .63 | .61 | .72 | .72 |
| CAR | | -.01*** | -.01** | -.02*** | -.02*** | -.01*** | -.01*** | -.01** |
| CFO | | .52 | .24 | .40 | .32 | .49 | .19 | .34 |
| ΔLIQUID | | -.005 | -.012 | -.001 | -.007 | -.008 | -.01 | -.012 |
| ΔGDP | - | .02 | .003 | .01 | .004 | .008 | .007 | .011 |
| _cons | | 5.1**** | 8.69**** | 10.1**** | 11.2**** | 9.9**** | 9.9**** | 8.47**** |
| Pseudo R ² | | 0.11 | 0.19 | 0.21 | 0.23 | 0.21 | 0.21 | 0.19 |

*p < .10, **p < .05, *** p < .01, **** p < .001

^a EM: dummy variable taking the value 1 if the bank has net income scaled by total assets in the interval between 0 (exclusive) and 0.008 (inclusive), and 0 otherwise; AFS: End-of year balance of AFS securities measured at FVTOCI scaled by total assets; FVTPL: End-of year balance of trading securities measured at FVTPL scaled by total assets; LLP: Loan loss provisions scaled by total assets; LISTED: dummy variable, taking the value 1 if the bank is publicly held, and 0 otherwise; AFSGAIN: Dummy variable, taking the value 1 if the total amount of realized AFS gains/losses transferred to net income is positive; AFSLOSS: Dummy variable, taking the value 1 if the total amount of realized AFS gains/losses transferred to net income is negative; LNASSETS: natural log of total assets; ΔASSETS: first difference in total assets, divided by total assets at the end of the previous year; CAR: Capital Adequacy Ratio, shareholders equity divided by Amount Subject to Credit Risk + Amount Subject to Market Risk + Amount Subject to Operational Risk; CFO: cash flows from operations scaled by total assets; ΔLIQUID: first difference in liquid assets (Cash and Balances with the Central Bank of Turkey + Trading Securities + Banks and Other Financial Institutions + Money Market Securities + Investment Securities Available for Sale (Net) + Reserve Deposits) as a percentage of total assets; ΔGDP: Annual growth rate of Gross Domestic Product per capita

Table 14: Results of the Probit Analysis for Zero Threshold, High Positive Earnings Group (HE)

| Variables ^a | Pred. | Dependent Variable: HE | | | | | | |
|------------------------|-------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | Coefficients | | | | | | |
| | | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
| AFS | | ---- | -4.7** | -4.94** | -5.52*** | -4.92** | -5.36*** | -4.72** |
| FVTPL | | ---- | 1.7 | 1.59 | 1.55 | 1.58 | 1.68 | 1.74 |
| LLP | | ---- | ---- | 12.67 | 18.08 | 12.67 | 10.74 | 4.32 |
| LISTED | | ---- | ---- | -.5 | -.5 | -.5 | ---- | ---- |
| AFSGAIN | | ---- | ---- | ---- | -.46 | ---- | -.49 | ---- |
| AFSLOSS | | ---- | ---- | ---- | ---- | -.01 | ---- | .003 |
| LNASSETS | | .45**** | .68**** | .77**** | .84**** | .77**** | .76**** | .68**** |
| ΔASSETS | | -.09 | -.5 | -.39 | -.39 | -.39 | -.47 | -.49 |
| CAR | | .02*** | .02*** | .02*** | .02**** | .02**** | .02**** | .02*** |
| CFO | | -.71 | -.6 | -.7 | -.67 | -.7 | -.56 | -.58 |
| ΔLIQUID | | .00005 | .005 | .001 | .0004 | .001 | .004 | .005 |
| ΔGDP | - | -.03 | -.02 | -.01 | -.01 | -.02 | -.02 | -.02 |
| _cons | | -7.5**** | -10.8**** | -12.1**** | -13.0**** | -12.1**** | -11.9**** | -10.8**** |
| Pseudo R ² | | 0.20 | 0.25 | 0.26 | 0.28 | 0.26 | 0.27 | 0.2522 |

*p < .10, **p < .05, *** p < .01, **** p < .001

^aHE: dummy variable taking the value 1 if the bank has income scaled by average total assets greater than 0.008, and 0 otherwise; AFS:End-of year balance of AFS securities measured at FVTOCI scaled by total assets; FVTPL: End-of year balance of trading securities measured at FVTPL scaled by total assets; LLP: Loan loss provisions scaled by total assets; LISTED: dummy variable, taking the value 1 if the bank is publicly held, and 0 otherwise; AFSGAIN: Dummy variable, taking the value 1 if the total amount of realized AFS gains/losses transferred to net income is positive; AFSLOSS: Dummy variable, taking the value 1 if the total amount of realized AFS gains/losses transferred to net income is negative; LNASSETS: natural log of total assets; ΔASSETS: first difference in total assets, divided by total assets at the end of the previous year; CAR: Capital Adequacy Ratio, shareholders equity divided by Amount Subject to Credit Risk + Amount Subject to Market Risk + Amount Subject to Operational Risk; CFO: cash flows from operations scaled by total assets; ΔLIQUID: first difference in liquid assets (Cash and Balances with the Central Bank of Turkey + Trading Securities + Banks and Other Financial Institutions + Money Market Securities + Investment Securities Available for Sale (Net) + Reserve Deposits) as a percentage of total assets; ΔGDP: Annual growth rate of Gross Domestic Product per capita.

Results for the impact of ownership structure on earnings management through available for sale securities are presented in Table (15). Although models introduce foreign ownership variables, AFS and AFSGAIN variables are nevertheless positive significant and LLP variable is not related to EM. LISTED variable however, is positive significant even AFSGAIN variable is used in the same model presenting support for H3. Models 3, 4, and 7 show that the coefficient of $MLS*AFS$ variable is negative significant. If the bank has MLS (as equity held by foreign shareholders, with other large domestic shareholders), this ownership structure significantly constrains EM. These findings are consistent with the view that the presence of multiple large shareholders or a second large shareholder other than the controller, competition for control increases; thus the bargaining problems between the large shareholders protect minority shareholders, and agency costs are alleviated (Gomes and Novaes 1999), therefore provide support for H4b.

Models 5, 6, and 7 provide support for H2b and H4a and reveal that $ULT*AFS$ variable is positively related to EM. Foreign shareholders that have the ultimate control over banks use AFS securities to beat the zero threshold. ULTIMATE group banks avoid reporting losses, and use AFS securities, not LLP to manage earnings.

Table 15: Results for the Impact of Ownership Structure on Earnings Management through Available for Sale Securities

| Variables ^a | Pred. | Dependent Variable: EM | | | | | | |
|------------------------|-------|------------------------|----------|-----------|-----------|----------|----------|-----------|
| | | Coefficients | | | | | | |
| | | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
| MLS | | .17 | ---- | 1.18** | 1.22** | ---- | ---- | 1.19** |
| ULT | | .45 | ---- | ---- | ---- | ---- | -1.17** | -.69 |
| MLS*AFS | - | ---- | -4.01** | -9.83**** | -9.84**** | ---- | ---- | -8.3** |
| ULT*AFS | + | ---- | ---- | ---- | ---- | 7.16*** | 17.7**** | 14.51**** |
| AFS | + | 6.46*** | 7.25*** | 9.13**** | 8.03**** | 5.47*** | 3.78* | 7.25*** |
| FVTPL | - | -1.94 | -1.94 | -1.81 | -1.77 | -1.87 | -.74 | -.93 |
| LLP | | -7.71 | .11 | 13.80 | 21.64 | -9.94 | -38.58 | -28.71 |
| LISTED | + | .54* | .75** | ---- | ---- | ---- | .87** | 1.01** |
| AFSGAIN | + | .69* | ---- | .62** | ---- | .5* | ---- | ---- |
| AFSLOSS | - | ---- | ---- | ---- | .14 | ---- | .18 | ---- |
| LNASSETS | | -.77**** | -.74**** | -.73**** | -.63**** | -.64**** | -.72**** | -.79**** |
| ΔASSETS | | .54 | .7 | .71 | .7 | .75 | .66 | .51 |
| CAR | | -.01*** | -.02*** | -.013*** | -.01*** | -.01*** | -.02*** | -.02*** |
| CFO | | .41 | .44 | .38 | .55 | .42 | 1.03 | 1.1 |
| ΔLIQUID | | -.01 | -.01 | -.01 | -.01 | -.02 | -.02 | -.01 |
| ΔGDP | - | .004 | .004 | .015 | .019 | .005 | -.00003 | .006 |
| _cons | | 11.1**** | 10.8**** | 10.4**** | 8.9**** | 9.3**** | 10.8**** | 11.5**** |
| Pseudo R ² | | 0.24 | 0.23 | 0.26 | 0.24 | 0.26 | 0.32 | 0.35 |

*p < .10, **p < .05, *** p < .01, **** p < .001

^aEM: dummy variable taking the value 1 if the bank has net income scaled by total assets in the interval between 0 (exclusive) and 0.008 (inclusive), and 0 otherwise; MLS: dummy variable, taking the value 1 if the bank has equity held by foreign shareholders, with other large domestic shareholders; ULTIMATE: dummy variable, taking the value 1 if the bank has equity held by foreign shareholders as ultimate owners; AFS:End-of year balance of AFS securities measured at FVTOCI scaled by total assets; FVTPL: End-of year balance of trading securities measured at FVTPL scaled by total assets; LLP: Loan loss provisions scaled by total assets; AFSGAIN: Dummy variable, taking the value 1 if the total amount of realized AFS gains/losses transferred to net income is positive; AFSLOSS: Dummy variable, taking the value 1 if the total amount of realized AFS gains/losses transferred to net income is negative; LISTED: dummy variable, taking the value 1 if the bank is publicly held, and 0 otherwise; LNASSETS: natural log of total assets; Δ ASSETS: first difference in total assets, divided by total assets at the end of the previous year; CAR: Capital Adequacy Ratio, shareholders equity divided by Amount Subject to Credit Risk + Amount Subject to Market Risk + Amount Subject to Operational Risk; CFO: cash flows from operations scaled by total assets; Δ LIQUID: first difference in liquid assets (Cash and Balances with the Central Bank of Turkey + Trading Securities + Banks and Other Financial Institutions + Money Market Securities + Investment Securities Available for Sale (Net) + Reserve Deposits) as a percentage of total assets; Δ GDP: Annual growth rate of Gross Domestic Product per capita.

Table 16: Results for the Specific Accrual Model

| Variables ^a | Pred. | Dependent Variable: LLP | | | | |
|-------------------------|-------|-------------------------|--------------|--------------|-------------|------------|
| | | Coefficients | | | | |
| | | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
| EBT | | -.0000153 | -.0001109 | -.0000414 | -.0001182 | -8.92e-06 |
| MLS | | ---- | ---- | -.0008515 | ---- | ---- |
| MLS*EBT | - | ---- | -.0001568 | .0002735 | ---- | -.0003452 |
| ULTIMATE | | ---- | ---- | .0017667 | ---- | ---- |
| ULTIMATE*EBT | + | ---- | .0006496* | .0002885 | .0006784* | ---- |
| LNASSETS | | -.0001698 | -.000156 | -.0001637 | -.0001689 | -.0001413 |
| Δ ASSETS | | -.0045*** | -.005402*** | -.005097*** | -.00547*** | -.00441*** |
| CAR | | -.00004** | -.0000419** | -.0000386** | -.0000419** | -.00004** |
| CFO | | .0006638 | .0018163 | .0011942 | .0018892 | .0006177 |
| LISTED | + | .00357*** | .003981*** | .0042159*** | .0039*** | .00378*** |
| Δ LIQUID | | .00006 | .000068 | .0000574 | .0000678 | .0000656 |
| Δ GDP | - | -.0005486**** | -.000532**** | -.000539**** | -.00053**** | -.0005**** |
| _cons | | .0111432* | .0107317* | .0100406 | .0108945* | .0107615* |
| Adjusted R ² | | 0.3216 | 0.3305 | 0.3305 | 0.3354 | 0.3192 |

*p < .10, **p < .05, *** p < .01, **** p < .001

^aLLP: Loan loss provisions scaled by total assets; EBT: the ratio of earnings before taxes and LLPs to total assets ;MLS: dummy variable, taking the value 1 if the bank has equity held by foreign shareholders, with other large domestic shareholders; ULTIMATE: dummy variable, taking the value 1 if the bank has equity held by foreign shareholders as ultimate owners; LNASSETS: natural log of total assets; Δ ASSETS: first difference in total assets, divided by total assets at the end of the previous year; CAR: Capital Adequacy Ratio, shareholders equity divided by Amount Subject to Credit Risk + Amount Subject to Market Risk + Amount Subject to Operational Risk; CFO: cash flows from operations scaled by total assets; LISTED: dummy variable, taking the value 1 if the bank is publicly held, and 0 otherwise; Δ LIQUID: first difference in liquid assets (Cash and Balances with the Central Bank of Turkey + Trading Securities + Banks and Other Financial Institutions + Money Market Securities + Investment Securities Available for Sale (Net) + Reserve Deposits) as a percentage of total assets; Δ GDP: Annual growth rate of Gross Domestic Product per capita.

Table (16) presents the results of the specific accrual model. Consistent with Duvan and Yurdoglu (2004) GDP growth is negatively associated with LLP.

EBT variable is not significant suggesting no EM through LLP in Turkish banking industry for the period 2006-2010. However the interaction variable of ULTIMATE*EBT affects this relationship. The negative coefficient changes to a positive significant coefficient. The positive significance of ULTIMATE*EBT shows that ultimately foreign banks use LLP for earnings smoothing.

6.4. SENSITIVITY TESTS

In Turkey, although founded as an authorized as deposit banks, Birlesik Fon Bank and Adabank belongs to SDIF. These banks are included in the sample, however, for sensitivity reasons, all models are run excluding these banks, and no significant differences are observed. Additionally, ERN variable is scaled by lagged total assets, and the results did not change. Results are also robust for the use of either probit or logit models.

6.5. SUMMARY OF THE FINDINGS

The results of the analyses show that the fair valuations of AFS securities and realized AFS gains are associated with EM to avoid losses in Turkish banking industry consistent with Beatty (1995), Beatty et al (1995), Zhang and Mei (2010), and Laux (2011).

Another finding is that listing status / the existence of public ownership creates incentives to manage earnings for Turkish banks consistent with Beatty et al (2002).

The findings present evidence on why and how ULTIMATE banks manage earnings. ULTIMATE banks use AFS securities to beat the zero threshold, and use LLP to smooth earnings. The enhancing effect of ultimate foreign shareholders diminishes if they merge with domestic institutions. This finding is consistent with the argument that large shareholder heterogeneity in MLS ownership structure

constrains EM (Maury and Pajuste (2005), Cronqvist and Fahlenbrach (2007), Attig et al. (2008), and Trainer (2011)).

CONCLUSION

This study analyzes the impact of ownership structure on Turkish bank's EM practices.

Introduction section presented the objectives, research questions, motivations, and contributions of the study. Chapter one reviewed the EM literature aiming to understand why and how banks manage earnings. Chapter two reviewed literature on FVA since one of the main tools that banks use to manage earnings is afforded by FVA rules; AFS category. Chapter three reviewed corporate governance literature focusing on the relation of ownership structures and EM. Chapter four overviewed Turkish banking industry. Chapter five developed the research hypotheses based on the literature reviewed and described the methodology of the study. Chapter six presented the research findings and this section concludes the thesis.

This study aims to contribute to the ongoing debate on the discretionary use of the fair value accounting rules in the context of IFRS, by providing empirical evidence on the banking system of an emerging country. The findings of this thesis suggest that Turkish Banks manage earnings to avoid reporting losses using fair value accounting rules and foreign ownership structure significantly affects EM behavior in Turkey.

These findings provide insight for the effects of foreign entry in emerging countries and Corporate Governance literature. Foreign entry in Turkish banking industry is widely criticized recently. Research provides substantial evidence on the effects of foreign shareholders on domestic banks in terms of competition, performance, and risk taking; whereas no evidence is detected for the effects of foreign entry on agency costs. The findings of this thesis suggest that the existence of foreign owners in MLS ownership constrains EM practices of Turkish Banks, however Ultimate ownership by foreign shareholders increases EM practices of Turkish Banks. The findings might be attributable to the decreased profits of foreign banks, and engaging EM to avoid loss reporting for not losing the confidence of the depositors.

Consistent with Karabiyik and Gokmen (2012) this study reveals that foreign and domestic partnerships mitigate agency problems in favor of minority shareholders which also contribute to Corporate Governance literature by adding foreign-domestic diversity as higher large shareholder heterogeneity that leads to less EM.

Facing the critics of fair value accounting, Barth and Landsman (2010: 401) specify that accounting methods are not responsible of determining how best to ensure the stability of the financial system, whereas financial stability is the task of the regulators. This study contributes to this argument by providing evidence from a country with severe experience in banking crises, suggesting that BRSA monitoring and regulations on LLP are effective in constraining bank EM via LLP.

Accounting research provides strong evidence on the positive relationship of EM to avoid losses and regulatory constraints, specifically for banking industry. However avoiding losses is gray EM. Accordingly, the findings of this thesis suggest that Turkish banking industry engages in gray, not black EM. Furthermore, this thesis suggests that the “grays” are the foreign banks that ultimately control the banks. However, gray EM should also be mitigated as well, since any alteration in reported earnings intensifies the opacity of the financial reports as Morgan (2002: 874) points out:

“Banks are black boxes. Money goes in, and money goes out, but the risks taken in the process of intermediation are hard to observe from outside the bank. Absent the steady hand of government (deposit and payments insurance, lender of last resort, supervision and regulation of bank risk-taking) the opacity of banks exposes the entire financial system to bank runs, contagion, and other strains of "systemic" risk.” (Morgan, 2002: 874).

This study also reveals that the small profits reported in Turkish banking industry might actually be losses in real terms for many of the deposit banks. Therefore, although the downtrend of the interest rates provided profit opportunities for banks, there is a disparity among the profits.

According to the findings of this thesis, the ownership structures of the newcomers to the Turkish banking system are crucial in the future of the Turkish banking industry. Increases in Ultimate foreign banks may result in more opacity of bank financial reports.

Every study has limitations. Ultimate foreign banks are more affected by the global financial crisis than the other banks in Turkey. Therefore, more evidence is needed for the generalization of the results. Additionally, the unwritten rules of Turkish banking sector prohibits paying dividends for four years. This behavior may affect the results. Furthermore, this thesis analyzes the two main tools of EM as AFS classification and LLP. However banks may engage in EM practices via various tools.

Future research may examine the alternative EM tools of Turkish banks and the impact of further corporate governance mechanisms in mitigating EM behavior.

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