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Conservatism Scores of Banking and Manufacturing Sectors: A Comparative Analysis

Gizem ÇOPUR VARDAR*

Aslı YIKILMAZ ERKOL**

ABSTRACT

The purpose of this research is to calculate and compare conservatism scores of banking and manufacturing sector firms listed in Borsa İstanbul (BİST) 100 index for the period between 2005 and 2017. The negative accrual measure was used in estimating unconditional conservatism, while the market-to-book ratio was used for estimating unconditional conservatism. According to the results, the conditional conservatism level of the two sectors is high and the conditional conservatism level of the banking sector is higher than the manufacturing sector. It is observed that the unconditional conservatism of both sectors is low but the manufacturing sector has tended to rise in recent years. Consequently, it is concluded that the conditional conservatism levels of the two sectors differ from each other significantly but the unconditional conservatism levels is not. In addition, the results indicated that the regulatory authority has a considerable effect on the banking sector unconditional conservatism level and the financial crisis period effect negative way the conditional conservatism level of both sectors.

Keywords: *Conservartism, conditional conservatism, unconditional conservatism, banking sector, manufacturing sector*

Jel Classification*: M41, G30*

Banka ve İmalat Sanayi Sektörü İhtiyatlılık Skorları: Karşılaştırmalı Bir Analiz
ÖZET

Bu çalışmanın amacı 2005-2017 yılları arasında BIST 100 endeksi banka ve imalat sanayi sektörlerindeki firmaların ihtiyatlılık skorlarını hesaplayarak, karşılaştırma yapmaktır. Koşulsuz ihtiyatlılığın tahmininde negatif tahakkuk yöntemi, koşullu ihtiyatlılığın tahmininde ise piyasa değeri/defter değeri oranı yöntemi kullanılmıştır. Elde edilen sonuçlara göre her iki sektörün koşullu ihtiyatlılık skoru yüksektir. Fakat bankacılık sektörünün koşullu ihtiyatlılık skoru imalat sanayi sektörüne göre daha yüksektir. Koşulsuz ihtiyatlılığın ise her iki sektörde düşük olduğu fakat imalat sanayi sektöründe son yıllarda yükselme eğiliminde olduğu gözlemlenmiştir. Sonuç olarak iki sektörün ihtiyatlılık düzeyinin birbirbirinden önemli ölçüde farklılaşmadığı ve düzenleyici otoritenin bankacılık sektörü ihtiyatlılık düzeyini önemli derecede etkilediği sonucuna varılmıştır.

Anahtar Kelimeler: *İhtiyatlılık, koşullu ihtiyatlılık, koşulsuz ihtiyatlılık, Bankacılık sektörü, İmalat Sanayi Sektörü*

JEL Sınıflandırması: *M41, G30*

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* Arş. Gör. Dr., Mersin Üniversitesi, İktisadi ve idari Bilimler Fakültesi, gcvardar@mersin.edu.tr, ORCID ID: 0000-0003-4772-6637.

** Arş. Gör. Dr., Mersin Üniversitesi, İktisadi ve idari Bilimler Fakültesi, ayikilmazerkol@mersin.edu.tr, ORCID ID: 0000-0002-2334-7731

1. INTRODUCTION

Conservatism affects the relevance and reliability of financial reports by changing the reported numbers and is a long-standing tradition in financial reporting. Conservatism is also a multi-dimensional application in terms of impact on financial statements (Özkan et al., 2013:110; Hansen et al., 2018:76).

A variety definition of conservatism can be found in literature but most comprehensive definition of conservatism is "a selection of criterion between accounting principles that lead to a minimization of reported cumulative earnings by slower revenue recognition, faster expense recognition, lower asset valuation, and higher liability valuation" (Givoly and Hayn, 2000:292). The basic affect of the conservatism on financial statements is underestimated book value relative to the market value of equity. On the other hand, the definition includes both unconditional and conditional conservatism. Unconditional conservatism is related to components of the statement of financial position with priority assets and liabilities, implicitly equity. Unconditional conservatism (balance sheet conservatism) requires understating assets and overstating liabilities systematically, in this way underestimates the value of net assets (book value of equity). This type of conservatism is not related to market news but accounting policies selected by management (Basu, 2005: 314). Conditional conservatism (earning conservatism) approach the concept from the perspective of the statement of profit and loss and other comprehensive income. Conditional conservatism requires recognizing revenues too late and expenses too early (Basu, 2005: 315). Accounting practices that need more verification to recognize good news than bad news and cause asymmetric timeliness of earnings to result in conditional conservatism (Mora and Walker, 2015: 623). This type of conservatism is related to market news.

The aim of the conservatism is to include the risk that a company may face in financial reports by the way of accounting policies and trends that reduce the value of net assets relative to their economic value (Ruch and Taylor, 2015:17). Conservatism should be cautious in order to reduce the negative effects of risky behaviors of the managers (Küçüksavaş, 2005: 21) and deals with uncertainties and - requires taking into - effects of unfavorable events likely to be faced by the company in the future. Therefore, conservatism means that reflecting uncertainties in the financial statements by accounting practices. In this way, conservatism limits the excessive optimism of the management, prevent the managers from manipulating the financial reports in their favor, reduce the level of information asymmetry and the agency costs, and increase the quality of the financial reports and the efficiency of corporate governance practices (Ruch and Taylor, 2015:18). Moreover, the conservatism results in lower debt costs by diminishing the information asymmetry between creditors and shareholders (Ahmed et al. 2002; Zhang 2008).

The studies on conservatism have discussed its effects on financial statements, time series analysis and earning management, its relationship with information asymmetry, cost of capital and cost of borrowing (Ruch and Taylor, 2015:24-34; Özkan et al., 2013; Francıs et al., 2015; Chen et al., 2014; Chen and Zhu, 2013). In this study, it was aimed to determine whether there is a differentiation between the banking sector and the manufacturing sector in terms of conditional and unconditional conservatism levels. For the purpose, the conservatism scores of 16 manufacturing firms and 8 commercial banks listed in BİST 100 between 2005 and 2017 were calculated. In the study, the term is started with the year 2005,

which international accounting standards put into effect in Turkey, for meaningful comparing of the financial statements presented in the same accounting practices. Conditional conservatism scores of firms operating in manufacturing and banking sector were calculated by the negative accrual method developed by Givoly and Hayn (2000) while conditional conservatism scores were calculated by the market to book ratio.

The reason for choosing the banking and manufacturing sectors for comparison is the existence of different risks and regulations. There is more intense sector-specific regulation in the banking sector than the manufacturing sector due to different risks. Also, as the banking sector have an important role in financing other sectors, banking sector and other sectors have mutual interaction in terms of debt contracts. For the reason, banking sector generally examined solely or comparatively with other sectors (Kaytmaz Balsarı et al, 2010; Chen et al., 2010, Watts and Zou, 2012; Lim et al, 2014) Therefore, it is expected that the study will demonstrate the possible impact of regulations and roles in the economy of two sectors on conservatism.

The study is organized as follows. In section two measurements methods of conservatism according to the types of conservatism revealed, related literature presented and hypothesis developed. Section three describes the sample, research design and presents empirical results, and section four concludes.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS

Conservatism applications in accounting practice are categorized into two groups as conditional and unconditional conservatism, according to the timeliness and baseline of the recognition. There are several methods to determine the presence and measure the level of conservatism specify to both type of conservatism.

Some accounting practices related to conservatism are categorized as unconditional (balance sheet) conservatism. Unconditional conservatism includes practices that provide the net value of assets is less than the expected market value, regardless of market news. Examples of accounting practices for this kind of conservatism are recognizing the costs of internally developed intangible assets as an expense rather than capitalizing and depreciating tangible assets for a higher depreciation rate, accelerated depreciation (Beaver and Rayn, 2005:269). The first example is about nonrecognition and the second one is about valuation of an asset. The effect of these accounting practices on financial statements are not related to the performance of the company, but only the accounting regulation or accounting policy selection of the management (Mora and Walker, 2015:623). For the reason, this type of conservatism is known as bad conservatism by users of financial statements (Efrag, 2013:6; André and Filip, 2015: 22).

The second type of conservatism is conditional conservatism. Basu (1997) refers to the concept of conditional conservatism for the first time. Basu (1997:4) describes conditional conservatism as an asymmetry, which causes bad news to produce a faster and more holistic effect on reported earnings than good news. If the accounting applications require more verification to recognize good news than bad news, this will result as an asymmetry between recognizing the time of good and bad news. The two aspects of conditional conservatism are

the way that the accounting system deals with the verification of recognizing economic losses and gains (Mora and Walker, 2015: 623-324).

According to the Basu (1997:4), this asymmetry is the result of faster recognition of unrealized losses than unrealized gains. This asymmetric timeliness of good news and bad news, in terms of recognition, creates a systematic difference in both the point of time and stability. Examples of this type of conservatism are the valuation of inventories with lower of cost and market value (net realizable value) or the application of impairment of tangible and intangible assets (Beaver and Rayn, 2005: 270). The impact of these practices on the financial statements is the bad news is recognized even if they are possible to realize while the good news is postponed until they are realized. For example, when the valuation of inventories is taken into account, the impairment of inventories is immediately recognized but value increase deferred until the gain is realized (until the sale of the inventories).

The division of conservatism practices into two types can be explained by the researchers concentrate on certain aspects of conservatism (Hansen et al., 2018:78). Although the two types of conservatism reduce the value of net assets, the fundamental difference between the two conservatism is the timing of the recognizing the assets, liabilities, income and expense and baseline of the recognition. There is a need for market news in conditional conservatism and bad news recognized more quickly than good news. In unconditional conservatism, the value of the asset (liabilities) immediately decreased (increased) due to accounting practices without relying on market news. As a result, the unconditional conservatism effect on the income statement is relatively consistent when the effect of conditional conservatism is transitory (Ruch and Taylor, 2015: 20).

Conservatism practices are closely related to the purpose of the standard makers for financial statements. In the valuation perspective, the primary objective of the financial statements is to provide financial information that will affect the investment decision and ensure that the market value of the equity is determined accurately. Investors, analysts and potential investors whose objective is to determine the firm value correctly will prefer financial statements prepared according to the valuation perspective (Ruch and Taylor 2015: 18). Investors, analysts, and potential investors do not favor the unconditional conservatism practices that make a difference between cash flows and earnings, regardless of market data. Unconditional conservatism practices give management opportunity to reduce the value of net assets without any data that will affect the performance of the investments. Unconditional conservatism damage neutrality and is considered as bad conservatism (André et al.., 2015:488).

If the standard makers adopt the contracting perspective, the primary objective of the financial statements will be to provide financial information that will increase the efficiency of the contracts and the responsibilities of the management (Ruch and Taylor 2015: 18; Mora and Walker 2015: 625). Creditors will prefer the contracting perspective and highly conservative financial statements. For the creditors, the information on the weaker financial position of the debtor (entity) is more important than the information on its strong financial position, because financial information on the weak condition of the entity is more relevant to the lenders to assess the risk of failure to fulfill the obligation of the entity (Ruch and Taylor 2015:18; André et al., 2015:488; André and Filip, 2015:22). Therefore, conservatively, both conditionally and unconditionally, prepared financial statements preferred by creditors.

Moreover, the aim of the general-purpose financial statements is to provide useful financial information to all stakeholders like the present and potential investors, lender and other creditors, who use that information to make decisions (conceptual framework). The level of conservatism of financial statements is important for all stakeholders with different and mostly conflicting purposes. General-purpose financial statements should be capable of meeting the needs of all stakeholders who have different purposes. For the reason, it is not possible to say that there is an optimal level of conservatism. On the one hand, managers want to present their financial statements in a way that will benefit the users of the financial statements, on the other, hand managers should manage earning and firm performance for compensation. Conservatism reduces borrowing costs, increase the efficiency of investments, provide better corporate governance, but also lead to costs and effects share price and shareholders' value. In addition, to managerial aims (firm-specific factors), different enforcement and regulation of financial reporting for different countries and industries have to be taken into account for assessing conservatism level of the financial statements (Moy, 2014: 73).

For this reason, studies on conservatism differentiated according to the type of conservatism considered (conditional and unconditional), the perspectives of different stakeholders (creditors and investors) and aim of the management or effect on financial indicators (borrowing cost and earning management).

Conservatism can be measured by various researchers with different measurement methods. According to Watts (2003), measurement methods of conservatism can be examined in three groups; asymmetric timeliness of earnings (Basu, 1997), negative accruals measure (Givoly and Hayn, 2000) and market-to-book ratio (Feltham and Ohlson, 1995:709; Beaver and Ryan, 2000)

According to asymmetric timeliness of earnings method developed by Basu (1997), share prices tend to reflect changes in the value of assets regardless of whether changes are related to losses and gains. In the method, conservatism is measured by asymmetric timing method based on the definition of conditional conservatism. In asymmetric timing measurement method, good news represents gains, while bad news represents loss. Therefore, the impact of bad news on earnings is faster than good news. Negative and positive annual stock returns are taken as an indicator of bad and good news (Basu, 2007: 13; Gökmen, 2013: 6). The coefficient which represents the effect of good news (positive annual stock return) on earnings is lower than the coefficient representing the effect of bad news (negative annual stock yield) on earnings shows that bad news affects earnings more quickly than good news. The coefficient that indicates the effect of bad news (negative annual stock yield) on earnings is one of the most important indicators of conservatism (Ren et al., 2015: 52).

The negative accrual method developed by Givoly and Hayn (2000) is based on the relationship between accruals and cash flows from activities. According to the researchers, conservatism is the application of accounting policies that will reflect income and earnings more slowly, expenses and losses more quickly in the financial statements, therefore the value of assets is to be low and the value of liabilities is to be high. Net income before depreciation during the life of an entity is equal to cash flows from operations. However, this balance may change in certain periods and in some periods cash flows from operations may be less than net income (positive accrual) or higher (negative accrual) before depreciation. It is possible to say

that if the cash flows obtained from the operations for a long period of time are higher than the net income before depreciation, the enterprise has conservatism (Gökmen, 2013:9-10).

According to Beaver and Ryan (2000), the most important indicator of conservatism is the difference between the market value and the book value. The net book value of conservative entities is lower than the current (actual) value. Therefore, it is possible to say that entities with high market-to-book value have high conservatism level provided that other conditions remain constant (Kootanaee et al., 2013: 311). Although the market values of assets and liabilities have changed over time according to the net asset method, these changes are not reflected in the financial statements. While the decrease in the value of the assets is recorded, the increase in the value of the assets may not be recorded. In this case, the value of the assets is shown lower.

There are many studies, which use negative accrual method developed by Givoly and Hayn (200) and market to book ratio developed by Beaver and Ryan (2000) method to measure firms' conservatism level. Table 1 indicates some of these studies.

Table 1. Studies on Negative Accrual Method and Market-to-Book Ratio

Study	**Measurement of Conservatism**	**Subject**	**Study**	**Method of Conservatism**	**Subject**
Xia and Zhu (2009)	Negative Accrual Method	Corporate Governance	Kravet (2014)	Negative Accural Method	Managerial Risk-taking
Suleiman (2014)	Negative Accural Method, market to book ratio	Corporate Governance	Hu and Jiang (2018)	Negative Accural Method	Managerial Risk Incentives
Ahmeda and Henry (2012)	Negative Accural Method	Corporate Governance	Biddle et al. (2016)	Negative Accural Method	Risk Managment
Lara et al. (2009)	Negative Accural Method	Corporate Governance	Kim et al. (2013)	Negative Accural Method	Equity Market
Foroghı et al. (2013)	Negative Accural Method	Corporate Governance	Artiach and Clarkson (2014)	Negative Accural Method	Equity Market
Ahmed and Duellman (2007)	Negative Accural Method, Market to Book Ratio	Board Structure	Francis et al. (2013)	Negative Accural Method, Market to Book Ratio	Shareholder value
Francıs et al. (2015)	Negative Accural Method	Board Structure	Chen and Zhu (2013)	Negative Accural Method	Debt structure
Elshandidy and Hassanein (2014)	Negative Accural Method	Board Structure	Beatty et al. (2008)	Negative Accural Method	Debt structure
Yunos et al. (2010)	Negative Accural Method	Ownership Structure	Zhang (2008)	Negative Accural Method, Market to Book Ratio	Debt Contracting
Alkurdi et al.. (2017)	Negative Accural Method	Ownership Structure	Ahmed et al. (2002)	Market to Book Ratio	Cost of Debt
Chen et al. (2014)	Negative Accural Method	Ownership Structure	Lara et al. (2016)	Negative Accural Method	İnvestment Decision

Sultana (2015)	Negative Accural Method	Audit Committee	Balakrıshnan et al. (2016)	Negative Accural Method	İnvestment Decision
Soliman (2014)	Negative Accural Method	Audıtıng Qualıİy	Ahmed and Duellman, (2007)	Book to Market Ratio	İnvestment Decision

As discussed above some studies focus on conservatism level and firm-specific factors in the literature, while some studies focus on country-specific factor, legal environment and industry-specific factors (Basu,1197; Chandra et al., 2004; Kwon, 2002).

In this study, it is aimed to calculate the unconditional and conditional conservatism scores of two different sectors such as banking and manufacturing sectors. It is expected that the banking sector both conditional and unconditional conservatism level higher than the manufacturing sector due to the sectoral risks and legal regulations. Thus, it is provided the following statement of hypotheses.

H_1: Conditional conservatism score in the banking sector is expected to be higher than the manufacturing sector

H_2: Unconditional conservatism score in the banking sector is expected to be higher than the manufacturing sector

3. DATA AND METHOD

In the study, the conservatism scores of 16 manufacturing firms and 8 commercial banks traded on BİST 100 between 2005 and 2017 were calculated. In the study, the term is started with the year 2005, which international accounting standards put into effect in Turkey, for meaningful comparing of the financial statements presented in the same accounting practices.

The market to book ratio method for conditional conservatism (Beaver and Ryan, 2000; Givoly et al., 2007; Ahmed et al., 2002) and accrual-based method (Givoly and Hayn, 2000) for unconditional conservatism is used to compare the conservatism degree of manufacturing and banking sector. In addition to financial information of the current year, the previous and next year financial information was taken into account to calculate unconditional conservatism score. Therefore, the first year in which the unconditional conservatism score can be measured is 2006 and the last year is 2016.

Data needed to measure unconditional conservatism obtained from financial statements of the firms disclosed in the website of Public Disclosure Platform for the years between 2009 and 2017 and website of Borsa İstanbul for the years between 2005 and 2008. Market to book ratio of the companies obtained from Thomson Reuters database.

The firms whose conditional and unconditional conservatism scores were calculated in the study shown in Table 2.

Table 2. Firm List

Manucafturing Sector				Banking Sector	
1.	Anadolu Efes Biracılık	9.	Kardemir D Grubu	1.	Akbank A.Ş.
2.	Arçelik	10.	Karsan Otomotiv San. Tic. A.Ş.	2.	Şekerbank T.A.Ş.
3.	Ford Otomotiv Sanayi	11.	Ereğli Demir Çelik	3.	Tekstilbank (ICBC)
4.	Gübre Fabrikaları	12.	Trakya Cam	4.	Türkiye Garanti Bankası A.Ş.
5.	Otokar Otomotiv ve Savunma Sanayi	13.	Tofaş Türk Otomotiv Fabrikası	5.	Türkiye Halk Bankası A.Ş.
6.	Petkim	14.	Afyon Çimento	6.	Türkiye İş Bankası A.Ş.
7.	Ülker Biskuvi Sanayi	15.	Goltaş Göller Bölgesi Çimento	7.	Türkiye Vakıflar Bankası T.A.O.
8.	Tüpraş Türkiye Petrol	16.	Kartonsan	8.	Yapı ve Kredi Bankası A.Ş.

Givoly and Hayn (2000) take into account accruals as a measure of unconditional conservatism due to the fact that the profit that is expected to be equal to the cash flows from the operating activities before the depreciation of the entity over the life of the entity. The method is based on the relationship between accruals and cash flows from operations. Accruals make a difference between cash flows and profit, accruals taken into account as an indicator of conservatism. Both direction and the accumulated amount of accruals are important for presence and degree of conservatism. Over time, the direction of accruals may change. Net income is expected to be less than the cash flow from the activities (negative accrual) after a period that the net income is higher than the cash flow from the activities (positive accrual). On the contrary, there should be a period of positive accrual after the period of negative accrual.

An indicator of the existence of conservatism is the long periods in which net income is less than cash flows (negative accrual). In other words, if the expected change of direction is not observed in the accruals indicates the conservatism. In addition, the accumulation rate of accruals over time indicates the degree of change of conservatism.

In the accrual basis method, accruals are calculated by the following formula.

$$\text{Accurals Ratio} = \frac{\text{Income Before Tax Extraodinary Items} + \text{Depreciation} - \text{Operating Cash Flow}}{\text{Total Assets}}$$

Conservatism Score= (Accruals / 3) x (-1)

The conservatism score of year t according to the negative accrual method is calculated by dividing 3 the sum of the scores of previous (t-1), current (t) and next (t+1) year and multiplying the result by the coefficient of -1. A positive score means high conservatism level while a negative score means low conservatism level.

One of the most important indicators of conditional conservatism is the difference between the market value and the book value. The net book value of companies with conditional conservatism is lower than the actual value. Therefore, it is possible to say that companies with high market-to-book value have the highest conservatism level, provided that other conditions remain constant (Beaver and Ryan, 2000; Givoly et al., 2007; Ahmed et al., 2002; Kootanaee et al., 2013: 311).

Descriptive statistics of unconditional and conditional conservatism calculated by the negative accrual method (NAM) and market-to-book (MV/BV) ratio method are shown in Table 3.

Table 3. Descriptive Statistics on Conditional and Unconditional Conservatism Scores

	Unconditional (NAM)		**Conditional (MV/BV)**	
Sectors	**Manufacturing Sector**	**Banking Sector**	**Manufacturing Sector**	**Banking Sector**
Mean	-0.0234	-0.0212	2,42	3,94
Median	-0.0270	-0.0217	1,46	1,29
S.Deviation	0.0571	0.0085	3,41	7,16
Max. Value	0.1852	-0.0384	0,19	0,45
Min. Value	-0.2346	-0.0020	27,97	31,67

In Table 3, it is observed that the average unconditional conservatism score of the manufacturing sector is -0.023 and the banking sector is -0.021. The scores calculated according to the negative accrual method are expected to be positive in order to say that the level of unconditional conservatism is high. The average unconditional conservatism score of both sectors is negative and low level. This result is not supported to the H_2 hypothesis.

For the conditional conservatism scores, it is seen that the average of the market-to-book value ratio is bigger than one for both sectors and the average conservatism score of the banking sector is (3.94) is higher than the average conservatism score (2.42) in the manufacturing sector. This result is supported to the H_1 hypothesis.

Descriptive statistics of the conditional conservatism scores of the banking and manufacturing sectors by years are shown in Table 4.

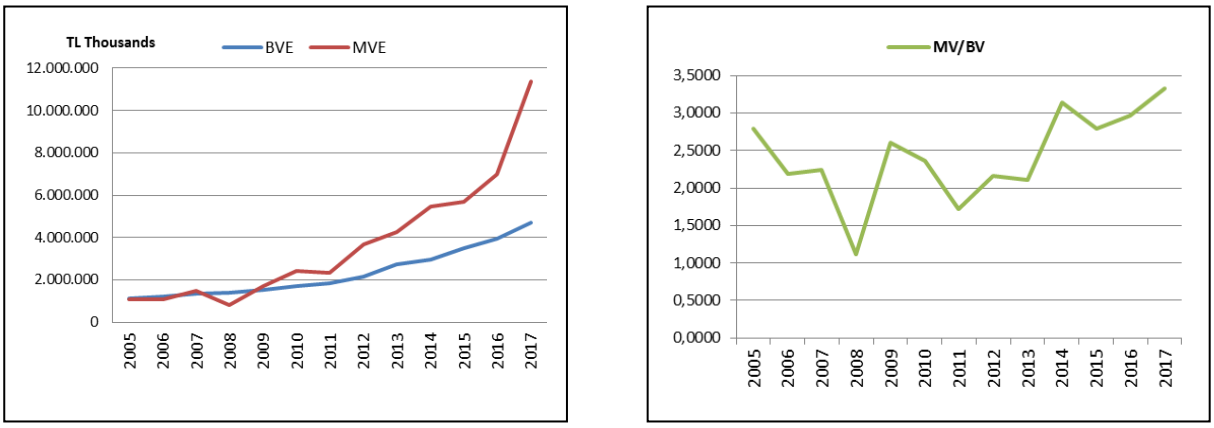
Table 4. Conditional Conservatism Scores by Years

MV/BV						
	Manufacturing Sector			**Banking Sector**		
Years	**Mean**	**Median**	**Standart Deviation**	**Mean**	**Median**	**Standart Deviation**
2017	3.3305	2.6516	2.7283	3.3203	0.8834	6.1164
2016	2.9666	1.8682	3.3476	2.5991	0.7292	5.0593
2015	2.7963	1.8943	2.5407	2.7470	0.8592	5.1178
2014	3.1345	2.1329	2.6466	4.1645	1.1699	8.6400
2013	2.1136	1.4753	1.4546	3.3089	1.0731	6.6140
2012	2.1656	1.9626	1.1631	4.6844	1.4958	9.5288
2011	1.7256	1.4143	1.2791	2.8988	1.0394	5.6209
2010	2.3601	1.6265	2.4528	5.2163	1.7327	10.5145
2009	2.6007	1.1260	5.5652	3.8393	1.6845	6.4917
2008	1.1147	0.4825	1.9129	2.4857	1.0130	4.5967
2007	2.2366	1.1026	3.5760	4.9850	2.5531	7.4831
2006	2.1956	1.0674	4.5408	4.3357	1.7667	8.1325
2005	2.7937	1.1241	6.7381	5.7288	2.4468	11.0860

MV/BV: Market-to-Book Value

Table 4 shows that the market-to-book value ratio of the firms in the banking and manufacturing sectors are bigger than one in all years. The banking sector market-to-book ratio is higher than the manufacturing sector for all years except for the last three years. Furthermore, the market-to-book value ratio of banks in the period of the 2005-2017 is the lowest in 2008 (2.49) and the highest in 2005 (5.72). While the market-to-book value ratio of the firms in the manufacturing sector in the period of 2017-2005 is the lowest in 2008 (1,11) and the highest in 2017 (3,33). These results are supported to H_1 hypothesis for all years except the last three years.

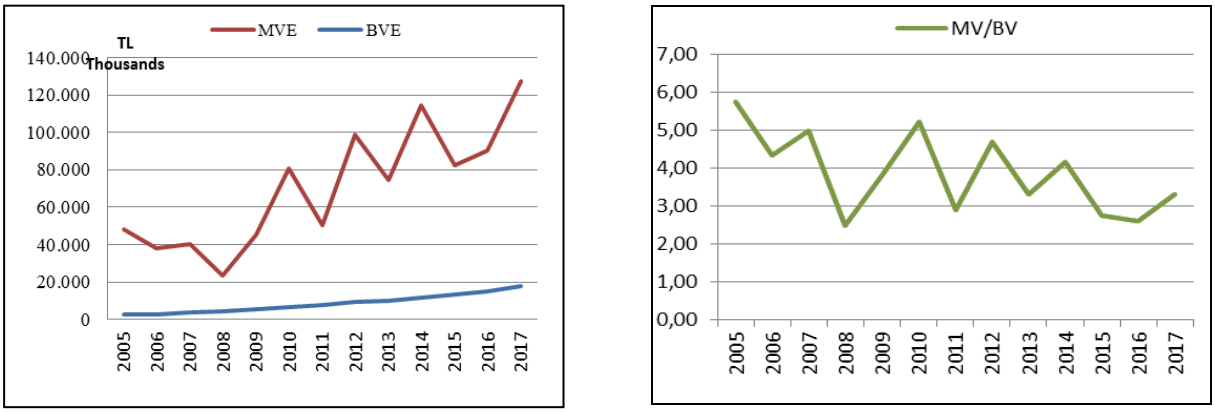
The market value of equity (MVE), the book value of equity (BE) and market-to-book ratio (MV/BV) of the manufacturing sector were examined in Graph 1.



Graph 1. Manufacturing Sector BVE, MVE and MV/BV

Graph 1 shows the market value and book value of the manufacturing sector for years. It is observed that the market value of equity is the lowest level in 2008. Consequently, the market to book ratio of the manufacturing sector at its lowest level in 2008.

The market value of equity (MVE), the book value of equity (BE) and market-to-book ratio (MV/BV) of the banking sector were examined in Graph 2.



Graph 2. Banking Sector BE, MVE and MV/BV

It is observed in the Graph 2 that the market value of equity is the lowest level in 2008 as in the manufacturing sector. As a result, the market-to-book ratio of the manufacturing sector at the lowest level in 2008.

It is thought that the market-to-book value lowest level in 2008 because of the financial crisis negative effect on the market value of firms. Therefore, the market value of equity (MVE) and book value of equity (BVE) are shown Graph1 and Graph2 separately to reveal financial crisis negative effect on market value. Some other researches on the effects of crises on conservatism level got the same result, although they take into account Asian financial crises and used the model of Basu. Hellman et al (2008) found that there was an increase in conservatism after the financial crises, significantly. Vichitsarawong et.al. (2010) also found that conservatism in the pre-crisis period was higher than during the crisis and after the crisis. In other words, conservatism during the crisis was lower than both after and before the crisis. The outcome of the research done by Gul et. al. (2011) showed a decrease of conservatism during the financial crises. Pressure on managers to convey positive (good) news to investors in crises period should be the reason for low conservatism level while stringent regulations to stabilize the financial system causes high conservatism level after crises. Additionally, if a firm needs a bank loan, banks could demand financial indicators from firms like a minimum rate of return on assets. Firms with this target may meet the condition by reducing conservatism. Especially during the financial crisis because of the limited borrowing capacity, conservatism level of firms may be decline seriously (Pothof, 2011:41).

In addition, it is seen from the graphs, for all years, the margin between the book value and the market value is higher in banking sector compared to the manufacturing sector. These results support to H_2 hypothesis that conditional conservatism in the banking sector higher than the manufacturing sector.

Basel III regulations are considered to be effective in the acceptance of the H_2. After the financial crises, conservatism in the banking sector has started to be seen as one of the key elements. As a result of great market discipline in the banking sector, conservatism level is higher than the manufacturing sector and strict regulations after financial crises have increased impact (Sánchez et.al., 2012: 3).

Basel III includes arrangements in four areas. The first area is about raising the quality, consistency, and transparency of the capital base. The Basel Committee is introducing a framework to promote the conservation of capital and the build-up of adequate buffers above the minimum that can be drawn down in periods of stress. The Basel III adds layers of conservatism that appear to roughly double the capital requirements on average. A key element of Basel III is an increase in the minimum common equity requirement from 2% to 4.5%. In addition, Tier 1 minimum capital requirement increased from 4% to 6% for better capital quality(Basel, 2010: 8; Basel, 2010:60).

The second area is enhancing risk coverage and the third one is the introduction of leverage ratio. The committee is considered that strong capital requirements are not sufficient alone. Therefore the Basel Committee is introduced internationally global liquidity standards for enhancing risk coverage and supplemented the risk-based capital requirement with a leverage ratio (Basel, 2010: 8; Basel, 2010:60).

The fourth area is about modifications in ensuring norms. Another objective of Basel III is reducing procyclicality and promoting countercyclical buffers. Thus it has described some measurements such as cyclicality of the minimum requirement, forward-looking provisioning, capital conservation, and excess credit growth. Forward looking provision advocates a change in the accounting standards towards from "incurred loss approach" to "expected loss (EL) approach. The goal is to improve the usefulness and relevance of financial reporting for stakeholders, including prudential regulators. The Committee supports an EL approach that captures actual losses more transparently and is also less procyclical than the current "incurred loss" approach (Basel, 2010: 5-6).

Key components of banks' financial statements are loans and fair valued financial instruments. For the reason, banks and industrial firms are differentiated from each other (Lim et al., 2014: 262). Although, fair value accounting seeks to present relevant assets, liabilities, liquidity, profitability, and solvency for banks (Illuace et al., 2014: 3), bank regulators argued that fair value accounting avoid banks to build up sufficient reserves in the good times to cover loan losses incurred during economic downturns (Laeven and Majnoni, 2003: 182-183). The aim of the fair value accounting is to reflect timely recognition of losses and gains; therefore fair value accounting is not a conservative valuation method. Banking sector regulators desired an accounting system that helps minimize the build-up of systemic risk (Illuace et al., 2014: 3). Basel regulations meet the need for sector-specific conservatism of the banking sector. From the conditional conservatism perspective, forward-looking provision (expected loss) of Basel III aims to increases the conditional conservatism level of banking sector against the accounting standards up to 1 January 2018. Under IAS (International Accounting Standards) 39 "Financial Instruments", impairment allowances were measured according to an 'incurred' loss model. Transition to the IFRS (International Financial Reporting Standard) 9 "Financial Instruments" on 1 January 2018, impairment allowance began to be measured according to expected credit loss (ECL) model (Ernst & Young, 2018: 2) compatible with Basel III requirements. Expected credit loss approach is an example of conditional conservatism because a loss is recognized by taking into account bad news by the assessment of credit department of banks but gain (good new) is not recognized until realization (IFRS 9: 5.5.4). The banks discussed in this study apply the Basel criteria according to the regulations of the Banking Regulation and Supervision Agency (BDDK). Therefore, although conditional conservatism practice for credit losses started to be implemented with IFRS 9, the effects of conditional conservatism are observed due to Basel regulations for the period in the study.

On the other hand, IFRS 9 carried into effect on 1 January 2018 for the manufacturing sector because there is no regulatory body specifically for the sector like banking sector. The effects of this regulation did not take place in the study due to the period covered in the study (2005-2017). Also, IFRS 9 did not bring material changes for the valuation of loans and receivables that are important for the manufacturing sector. As with IAS 39, loans and receivables continue to be valued at amortized cost in IFRS 9 (IFRS 9: 4.1.1- 4.1.2).

Table 5 shows the unconditional conservatism scores of the banking and manufacturing sectors over the years.

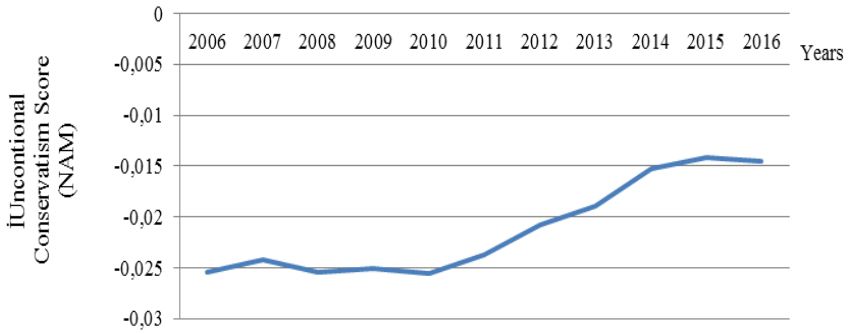
Table 5. Unconditional Conservatism Scores by Years

Years	Manufacturing Sector			Banking Sector		
	Mean	Median	Standart Deviation	Mean	Median	Standart Deviation
2016	0.0016	-0.0016	0.0560	-0.0145	-0.0161	0.0069
2015	0.0083	0.0202	0.0550	-0.0142	-0.0158	0.0061
2014	-0.0078	-0.0084	0.0532	-0.0153	-0.0155	0.0051
2013	-0.0227	-0.0202	0.0652	-0.0189	-0.0194	0.0050
2012	-0.0627	-0.0490	0.0516	-0.0208	-0.0212	0.0055
2011	-0.0605	-0.0501	0.0468	-0.0237	-0.0253	0.0071
2010	-0.0224	-0.0266	0.0579	-0.0256	-0.0271	0.0079
2009	-0.0033	-0.0114	0.0587	-0.0251	-0.0251	0.0077
2008	-0.0075	-0.0184	0.0449	-0.0254	-0.0254	0.0091
2007	-0.0382	-0.0367	0.0504	-0.0242	-0.0256	0.0098
2006	-0.0426	-0.0570	0.0431	-0.0254	-0.0277	0.0114

NAM: Negatifve Accrual Method

The scores calculated according to the negative accrual method are expected to be positive in order to say that the level of unconditional conservatism is high. As seen in Table 5, the non-operating accrual rate of the banking sector is negative for all years, while in the manufacturing sector it is negative except for the last two years. These results are not supported H_2 hypothesis that unconditional conservatism in the banking sector higher than the manufacturing sector. The NAM scores of the banking sector between 2006- 2016 are shown in Graph 3.

Graph 3. Unconditional Conservatism Scores of Banking Sector (2006-2016)

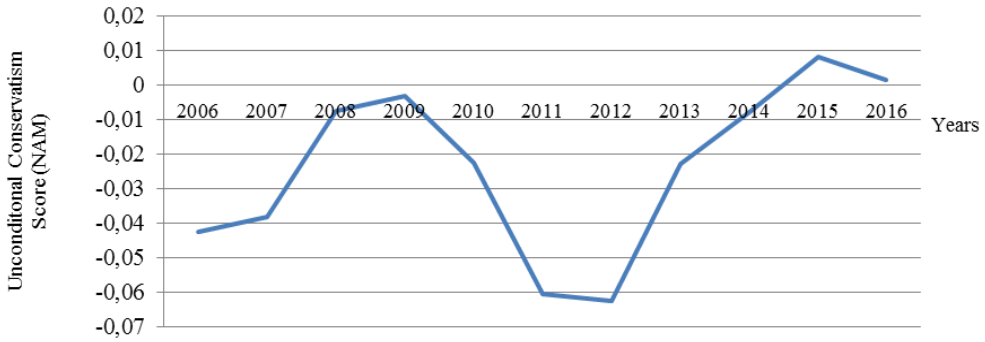


In Graph 3, it is observed that the negative accrual rate of the banking sector was nearly stable between 2006 and 2010, and the negative accruals begin to increase in 2010 and increase continue until 2014 approaching to zero. In the period of the global financial crisis (2008-2009), it is observed that the negative accrual rate is stable and there is a steady increase in the unconditional conservatism of banks after the crisis period. The steady increase after 2010 is expected to result from the impact of the Basel III criteria set by the Basel Committee after the 2008 financial crisis to eliminate the deficiencies of Basel II and to aim improve financial regulations and strengthen the sector. It is thought that the first three areas in Basel III regulations (raising the quality, consistency and transparency of the capital base; enhancing risk coverage, and the introduction of leverage ratio) affect the unconditional

conservatism. These areas are increasing the reserve amount by increasing the designated rates independent from market news.

The NAM scores of the manufacturing sector between 2006-2016 are shown in Graph 4.

Graph 4. Unconditional Conservatism Scores of Manufacturing Sector (2006-2016)



Graph 4 shows that the negative accrual rate of the manufacturing sector tends to increase in the period of 2006-2009 and it tends to decrease in the period 2009-2012. It is observed that the negative accrual rate is the lowest level in 2012, and the rate has increased steadily for the four years following 2012 and approaching the positive. The negative accruals are positive in the last two years (2015 and 2016).

4. CONCLUSION

In this study, the conservatism scores of the 16 firms in manufacturing and 8 firms in banking sector quoted in BİST 100 index between 2005 and 2017 were calculated. The conditional conservatism scores of the firms are measured by the market-to-book value ratio and the unconditional conservatism scores are calculated by negative accrual method. According to unconditional conservatism level, it is observed that the unconditional conservatism of both sectors is low but the manufacturing sector has turned positive in recent years. However, the unconditional conservatism levels of the two sectors do not differ from each other significantly. Furthermore, the results indicate that the regulatory authority has a considerable effect on the banking sector conservatism level due to the increase after the financial crisis period. The study is revealed that conditional conservatism level is high for both sectors and also conditional conservatism scores of the banking sector are higher than the manufacturing sector. Another crucial result of our study is that the conditional conservatism scores of the banking and manufacturing sectors are the lowest level in the financial crisis period. This result supported studies that the level of conservatism in the pre-crisis and post-crisis period is higher than the crisis period (Vichitsarawong et al. 2010; Hellmann et. al., 2008; Gul et. al., 2011).

When the results obtained from the study are evaluated as a whole, it is observed that the banking sector conditional and unconditional conservatism scores are higher than the manufacturing sector. It is thought to be, the most important factor affecting this result is the Basel III criteria. it is believed that the higher unconditional conservatism score in banking

sector according to manufacturing sector stem from Basel III regulations on the quality, consistency and transparency of the capital base; risk coverage and leverage ratio. This result can arise from the Basel III criteria set by the Basel Committee after the 2008 financial crisis to eliminate the deficiencies of Basel II and to aim to improve financial regulations and strengthen the sector. After the committee have adopted Basel III in 2010, the steady increased in unconditional conservatism level of the banking sector was observed between 2011 and 2016. For conditional conservatism results, it is believed that the higher conditional conservatism score in banking sector according to manufacturing sector result from Basel III regulations on expected loss (EL) approach. The banks have a certain degree of freedom when forecasting expected losses in the future and can use this freedom for earning management (Sánchez et.al., 2012: 3).. The more frequent fluctuation between 2011and 2016 in the conditional conservatism scores in the banking sector is estimated to be due to earnings management.

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