ACCOUNTING CONSERVATISM: A LITERATURE REVIEW*

Dr. Mehpare KARAHAN GÖKMEN**

ÖZET

The aim of this study is to present a literature review for accounting conservatism that is one of the most ancient and debatable concepts in accounting. As a consequence of these debates, it is also an attractive topic for academic research. Initially theoretical background is examined for accounting conservatism which consists of definition, explanations for existence of accounting conservatism and measurement methods in order to provide a better insight. Then academic studies on accounting conservatism are analyzed under three major categories. Due to the vast number of studies, most commonly cited ones in well-known academic journal or meetings are selected to be presented. One of the inferences of this study is the lack of interest on this topic in Turkey. This fruitful area needs to be examined in order to observe the evidence for Turkish case. Additionally recent exemption of conservatism (prudence) from IASB's Framework enhances the significance of the topics as a research question.

Keywords: Accounting Conservatism, Literature Review

Jel Codes: M40, M41, M49.

MUHASEBEDE İHTİYATLILIK: BİR LİTERATÜR ARAŞTIRMASI

ÖZET

Bu çalışmanın amacı, muhasebenin en eski ve tartışmalı konularından biri olan muhasebede ihtiyatlılık için bir literatür araştırması sunmaktır. Bu tartışmaların bir sonucu olarak, akademik araştırmalar için çok dikkat çekici

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bir konu olmuştur. İlk olarak, daha iyi bir bakış açısı sunabilmek için, muhasebede ihtiyatlılığın tanımını, muhasebe ihtiyatlılığın varlığının sebeplerini ve ölçme yöntemlerini içeren teorik altyapı incelenmiştir. Daha sonra üç ana kategori altında muhasebede ihtiyatlılık analiz edilmiştir. Çalışma sayısının çokluğu sebebiyle, iyi bilinen dergi ve toplantılarda yer alan, en çok atıf almış çalışmalar sunulmak üzere seçilmiştir. Bu çalışmanın çıkarımlarından bir tanesi, Türkiye'de bu konuya duyulan ilginin eksikliğidir. Bu verimli alan Türkiye örneğindeki sonuçları gözlemlemek adına incelenmelidir. Ayrıca ihtiyatlılığın IASB'nin Kavramsal Çerçeve'sinden (IASB's Framework) çıkarılması bir araştırma sorusu olarak bu konunun önemini artırmıştır.

Anahtar Kelimeler: Muhasebe İhtiyatlılık, Literatür Taraması

Jel Kodlar: M40, M41, M49.

INTRODUCTION

Accounting conservatism is one of the oldest concepts in accounting. However debates on accounting conservatism are also as old as its existence. While a number of academicians attribute conservatism as an integral part of accounting, some other parties advocate that it should not be applied due to bias introduced into accounting information with incorporation of conservatism in financial statements. If literature on accounting conservatism is reviewed, it is hard to state that a conclusion have been reach. In this study, it is aimed to provide a literature review on this important and debatable concept. Before the review, definition of accounting conservatism, explanations for its existence and measurements methods will be discussed in order to provide a better insight.

1.   DEFINITION OF ACCOUNTING CONSERVATISM

Accounting conservatism may both be defined in the contexts of accounting theory and accounting standards. "Anticipate no profit, but anticipate all losses" is the traditional definition conservatism that is being used in accounting theory. This adage is implying that revenue should not be recognized before existence of legal claim and verifiability of the revenue to be recognized rather than recognition revenue when all related cash flows are received (Watts 2003, 208). Another description is made by Sterling (1967, 113) as the selection of the most conservative treatment when se-

veral possible accounting treatments are available.

Recently definition conservatism is being made depending on the sources that constitute conservative applications. One of such classifications is made by Givoly, Hayn and Natarajan (2007, 96). They state that systematic understatement of net assets is a major result of conservative accounting treatments and this consequence provides the basis for their classification. The first source of conservatism that causes the understatement of net assets is financial reporting system that fails to capture positive present value projects and subsequent increases in the value of assets. Historical cost convention coupled with the transaction-based accounting approach and the assumptions of going concern and a stable monetary unit are the examples of financial reporting features that cause this kind of conservatism. Management has limited or no discretion in deviating from this type of conservatism.

The other two sources of conservatism are minimization of assets on the balance sheet and the recognition of losses in a more timely fashion than gains. In these latter kinds of conservative management has discretion to affect the level of conservatism that is applied while preparing financial statement (Givoly et al. 2007, 96).

There are some other, and in some aspects overlapping, classifications of conservatism exist. In those classifications, first source of conservatism is not usually taken into consideration and conservatism is commonly grouped into two depending on the latter two sources. Ball, Kothari and Robin are the first ones who discriminate types of conservatism. They name conservatism as "income conservatism" and "balance sheet conservatism". "Income conservatism" is defined as the asymmetrical timeliness in recognition of economic losses and "balance sheet conservatism" is defined as understatement of equity value due to low level of assets than and/or high level of liabilities (Ball et. al 2000, 20).

Another and probably most commonly used classification is made by Beaver and Ryan (2005) as conditional and unconditional conservatism. Unconditional conservatism is defined as the statement of book values of net assets below their expected market value at initial recognition of those net assets. Immediate expensing of internally generated goodwill and setting amortization rate for fixed assets above expected economic rate can be given as examples of unconditional conservative applications (Ryan 2006, 513).

The traditional definition of conservatism given above is interpreted by Basu (1997, 7) as the requirement of a higher level of verification in recognition of good news as gains when compared to recognition bad news as losses. This interpretation had a significant impact on accounting research about conservatism and it changed the focus from balance sheet to income statement. (Ohlson and Lent 2006, 507) Depending on the definition of conservatism made by Basu (1997) conditional conservatism is specified as decreasing the book value of net assets under unfavorable circumstances but not increasing their values under favorable conditions and the latter situation is said to be the conservative approach. Examples of conditional conservatism are lower of cost or market rule and impairment of fixed and intangible assets. These two types of conservatism are also named as ex-post or news dependent and ex-ante and news independent respectively (Beaver and Ryan 2005, 269-270).

Definitions of accounting conservatism under different accounting standards (Turkish Accounting System, International Financial Accounting Standards and U.S. Generally Accepted Accounting Principles) are more or less same. Here only definition of IASB (previously) is provided:

"...Prudence is the inclusion of a degree of caution in the exercise of the judgments needed in making the estimates required under conditions of uncertainty, such that assets or income are not overstated and liabilities and expenses are not understated. However, the exercise of prudence does not allow, for example, the creation of hidden reserves or excessive provisions, the deliberate understatement of assets and income or the deliberate overstatement of liabilities or expenses because the financial statements would not be neutral and therefore not have the quality of reliability." (IASB Framework for Preparation and Presentation of Financial Statements, 2001, paragraph 37)

Actually the situation explained above was available until recently. Because conservatism is excluded from IASB (International Accounting Standards Board) Framework for Preparation and Presentation of Financial Statements, as 2010, as a result of joint project between IASB and FASB (Financial Accounting Standards Board). A Discussion Paper in 2006 and is published by IASB in July 2006 that states that necessasity to remove conservatism from conceptual framework. (IASB "Preliminary views on an Improved Conceptual Framework for Financial Reporting", 2006, 1-84)

2. EXPLANATIONS FOR ACCOUNTING CONSERVATISM

Systematical classification of explanations for accounting conservatism was firstly done by Watts (2003, 209-210) basing on prior research. According to this study there are four factors that cause conservatism to exist. They are namely contracting, litigation, income tax and regulatory (or political) explanations. Besides these reasons, earnings management and abandonment option for unprofitable operations can be listed as additional explanations. However, even though previous studies imply their potential effect on existence of conservatism, their explanatory power is limited.

Recent studies verify the power of these explanations indicating the impact of each determinant of conservatism. Following Beaver and Ryan (2005, 269-309), which evidence the preemptive role of unconditional conservatism on conditional conservatism and therefore discovered a negative relationship between these two types, studies majorly suggested that these explanations basically cause only one kind of conservatism. However, there are some studies that explanations can imply both types of conservatism.

Ball and Shivakumar (2005, 83-128) argues that as tax, litigation and regulation explanations for conservatism holds for unconditional conservatism, contracting explanation only cause conditional conservatism. Basu (2005, 312-315) suggests that income tax and product market regulations gave rise to application of unconditionally conservative accounting methods. In addition, he says that conditional conservatism arises due to contracting factors as an efficiency enhancing factor. Qiang (2007) investigates the impact of these explanations on both conditional and unconditional conservatism through individual and joint analysis and he finds that as contracting causes conditional conservatism and regulation and taxation cause unconditional conservatism, only explanation that induces both types is litigation. In a similar study conducted by Lara et al. (2009), it is reached that contracting is the single determinant that induce only one type of conservatism (that is conditional conservatism) and remaining factors give rise to both.

3. MEASURES OF ACCOUNTING CONSERVATISM

Conservatism is one of the oldest conventions in accounting literature. However efforts for gauging conservatism are fairly recent. This area of study

started after the seminal work of Basu (1997). Being the most commonly cited and applied measure, his influential study leaded other authors and different measurement methods are developed in order to gauge conservatism. Among other five of these studies (including Basu – 1997) are widely accepted and used in academic researches. These studies are listed below with the names used in literature:

- Basu (1997) – Asymmetrical Timeliness (AT) Measure

- Beaver and Ryan (2000) – Book to Market Ratio (BTM) Measure

- Givoly and Hayn (2000) – Negative Accruals (NA) Measure

- Penman and Zhang (2002) – Hidden Reserves (HR) Measure

- Ball and Shivakumar (2005) – Asymmetrical Accruals to Cash Flows (AACF) Measure

As some of these measures are employed to gauge conditional conservatism, other are used to gauge unconditional conservatism. Each of them are discussed in detail in the following sections.

3.1.   Asymmetrical Timeliness Measure for Conservatism

Basu (1997) model for measuring conservatism basis on his interpretation of what conservatism embodies. According to his interpretation, requirement of a higher degree of verification for goods news in comparison to bad news results in conservatism. In this study good news stands for gains and bad news stands for losses. Thus bad news is reflected in earnings timelier than good news. Suppose that there is a change in the estimated life of a fixed asset. If the change increase the life of the fixed asset (good news), depreciation expenses will decrease and will be reflected earnings smoothly. Conversely if the change reduces the life of the fixed asset (bad news), depreciation charges will be reflected in earnings more quickly. In summary, responsiveness of earnings to bad news is higher and quicker than to good news.

The author constructs his hypothesis on the interpretation above in order to gauge conservatism. Negative and positive annual stock returns are used to proxy for bad and good news respectively. Because he suggests that annual stock returns contain some information about the firm that may not be reflected in earnings. The hypothesis (that "bad news" is reflected in earnings timelier than "good news") is tested using a "reverse regression" model where earnings are the dependent variable and annul stock returns are the independent variable. The model is as follows (Basu 1997):

$$\frac{EPS_{it}}{P_{it-1}} = \alpha_1 + \alpha_2 DR_{it} + \beta_1 R_{it} + \beta_2 R_{it} + DR_{it}$$

where;

EPS_i / P_i : Price deflated earnings

DR :dummy variable, 1 when returns are negative, 0 otherwise

R : rate of return for the period

β_1 : measure for sensitivity of earnings to returns.

Basu (1997) predicts a higher association between earnings and returns when returns are negative (bad news) than returns are positive (good news). Accordingly he expects that slope coefficient and R^2 for negative returns should be higher than positive returns. If is significantly positive, then it is accepted that conditional conservatism is inherent in financial statements.

The author tests his hypothesis on all firms from 1963 to 1990 with available data on CRSP NYSE/AMEX Monthly Files, Compustat Annual Industrial and Research Files that makes 53.321 firm-year observations. He uses pooled OLS regression analysis. Consequently, his findings support his hypothesis as sensitivity of earnings to negative returns is four and a half times as large as the sensitivity of earnings to positive returns.(Basu 1997)

3.2. Book-to-Market Ratio Measure for Conservatism

Book-to-Market Ratio measure for conservatism is developed by Beaver and Ryan (2000). Their study depends on the conservatism definition of Feltham and Ohlson (1996) which relates conservatism to difference between book value and market value. Additionally previous research on expectations of book return on equity in the discounted residual income valuation model and correlation of book-to-market ratio to future book return on equity constitutes the primary motivation for the study (Beaver and Ryan 2000).

The authors distinguish two components of BTM ratio, that are namely biases and lags, which have implications for BTM's ability to estimate future book return on equity. Biases occur when book value is persistently higher (lower) than markets value, consequently BTM ratio is persistently above (below) one. Joint effect of accounting processes (e.g. conservatism and historical cost principle) and the economic environment (e.g. continuous

flow of positive present value projects) triggers bias component of BTM ratio. Lags are unexpected economic gains or losses that are recognized in book value occasionally rather than immediately. Thus lags temporarily cause BTM ratio to be higher or lower than its mean but in the end it returns to its mean (if there is no bias). Similar to bias, lag can be triggered by accounting process and economic environment. Accounting system principles such as debt at amortized cost and economic environment that cause unexpected change in positive present value projects cause lags (Beaver and Ryan 2000).

In summary, Beaver and Ryan (2000) hypothesize that future book return on equity is negatively affected from bias and lags components of BTM and bias component tend to persist as lags component likely to perish over time. In order to test this hypothesis they construct the following equation where they regress BTM on current and five lagged returns with fixed firm and time effects:

$$BTM_{it} = \alpha_t + \alpha_i + \sum_{j+0}^{6} \beta_j R_{t-i,j} + \varepsilon_{t,i}$$

where;

BTM_{it} : Book to market ratio

α_t : Fixed time variation in BTM ratio common to the sample firms

α_i : Firm effect (Bias component of BTM ratio)

$R_{t-i,j}$: Current and 5 lagged Return on Equity (Lag component of BTM ratio)

β_j : Regression coefficient of $R_{t-i,j}$

α_t is the intercept term that is common to all firm observations. α_i is the firm effect that is not explained by time effect and current and lagged returns. It is the bias component and the measure of unconditional conservatism according to Beaver and Ryan (2000). Annual return on equity is used as the proxy for lag component.

Beaver and Ryan (2000) tested their hypothesis found that the association between BTM ratio and bias component is higher than lags component on all available firms on Compustat Annual PST tape from 1974 to 1993. It should be noted that conservatism measure, α_i, does not provide an absolute amount; rather it provides a relative measurement basis.

3.3. **Negative Accruals Measure for Conservatism**

Givoly and Hayn (2000) developed this conditional conservatism measure depending on the relation between accruals and cash flows from operations. The definition of conservatism that is referred in the study states that conservatism leads to the selection of accounting policies that results in slower recognized revenue (and gains), faster recognized expenses (and losses), understated assets and overstated liabilities.

In accordance with the definition the authors point out the multi period dimension of accruals. During the life of a firm net income before depreciation and amortization equals the cash flow from operations. However, between periods there would be an unbalanced distribution. A period in which negative accruals (net income falls below cash flow from operation) is observed is expected to be followed by periods with positive accruals (net income exceeds cash flow from operations). If negative accruals are present in the financial statements of a firm over a long period of time, then this firm is attributed to be conservative. Moreover a change in the rate of accumulation indicates a change in the degree of conservatism (Givoly and Hayn 2000).

Accruals (total accruals) are defined as the difference between depreciation added net income and cash flow from operations and are divided into two components that are namely operating accruals and non-operating accruals. While operating accruals result from daily business activities of the firm, remaining accruals are called as non-operating accruals such as loss and bad debt provisions (or their reversal), restructuring charges, the effect of change in estimates, gains and losses on the sale of assets, asset write-downs, the accrual and capitalization of expenses and the deferral of revenue and their subsequent recognition. This latter group of accruals is majorly subject to management discretion in regards of their timing and amount. Therefore Givoly and Hayn (2000) refer the accumulation of non-operating accruals over time as the measure of conservatism. If accumulation is negative direction, then financial reporting is attributed to be conservative.

Non-operating accruals are the difference between the total accruals and operating accruals. Their calculations are given below respectively (Givoly and Hayn 2000):

Total Accruals (before depreciation) = (Net Income + Depreciation) – Cash Flows from operations

Operating Accruals = Δ Accounts Receivable + ΔInventories +
ΔPrepaid Expenses -ΔAccounts Payable - ΔTaxes Payable

Conservatism is measured on all firm on the 1999 Compustat database from 1950 to 1998 which makes the full sample 593 firms. The results of the tests for NA measure indicates that conservatism exist on the sample firms and have increased in recent 40 years. These results are consistent with other three measures of conservatism used in the study. Those measure are AT, BTM ratio and skewness of earnings. The former two measures are discussed previously. The last one is developed by the authors in this study. According to this measure, under conservative financial reporting earnings should be negatively skewed, as recognition expenses and losses are quicker than recognition of revenues and gains.[1] Overall results of the study indicate that conservatism is inherent in financial reporting and has increased in last 40 years (Givoly and Hayn 2000). It is interesting that both measures for conditional (AT, NA and skewness of earnings) and unconditional conservatism exhibit the similar results. However, in the accounting literature a negative relation between conditional and unconditional conservatism was evidenced (e.g. Beaver and Ryan (2005).

Givoly and Hayn (2000) also point out that there may be other explanations for accumulation of negative accruals such as restructuring activities, merger and acquisitions, increased cost of pension and post-retirement benefits and growth and inflation. However tests of these factors are inconsistent with the view that they are able to better explain increased negative accruals rather than conservatism.

3.4. **Hidden Reserves Measure for Conservatism**

Penman and Zhang (2002) developed the C-Score for measuring unconditional conservatism. C-Score gauge the conservatism that is defined by authors as application of accounting policies and estimates that keeps book value of net assets relatively low (e.g. application of LIFO rather than FIFO or expensing of research and development cost rather than capitalizing).

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1   *This method is not included as one of the measure of conservatism. Because it is not employed as commonly as the other five models.*

Penman and Zhang (2002) suggest that conservatism implies "hidden reserves" by the ways of reducing earnings when a firm increases its investment. The ratio of these reserves to "net operating assets" constitutes the C-score as follows:

$$C_{it} = \frac{ER_{it}}{NOA_{it}}$$

ER$_i$: Estimated reserve created by conservatism

NOA$_i$: Net operating assets

Only operating assets are included in the denominator of the equation. Because book values of financial assets are equal or very close to market values as long as interest rates do not change broadly and therefore conservatism do not affect financial assets. As both assets and liabilities are affected from conservatism, netting is appropriate (Penman and Zhang 2002).

Reserves are only composed of inventory reserve, research and development reserve and advertisement reserve. Actually total reserves consist of all operating items on balance sheet such as bad debt allowances, valuation allowances, deferred revenue, etc. However these reserves are also subject to management manipulation. In order to distinguish temporary management accounting manipulation from persistently applied accounting policies and estimates, only three groups are included. Managers are not able to change accounting treatment for these investments freely from period to period, and then they are less subject to manipulation. These reserves are calculated as in the following (Penman and Zhang 2002).

• Inventory reserve is equal to the LIFO reserve reported in the footnotes of financial statement.

• R&D reserve is estimated as the amortized R&D assets that would have been on the balance sheet if R&D had not been expensed.

• Advertising reserve is the calculated brand assets created by advertising expenditures.

Penman and Zhang (2002) use this conservatism measure in order to test that application of conservatism can deteriorate earnings quality. Earnings are stated to be of high quality if they are good indicators of future earnings and earning can be good indicators of future earnings when they are

sustainable. Unsustainable earnings results in poor earnings quality. The authors used nonfinancial firms on NYSE and AMEX with available data on Compustat Annual Industrial and Research Files from 1975 to 1997. The results show that consistent application of conservative accounting cause poor earnings quality.

3.5. **Asymmetrical Accruals to Cash Flows Measure for Conservatism**

Ball and Shivakumar (2005) treat conservatism as the proxy for earnings quality and attempt to gauge it in private and public firms. The authors build up a model that originates from Basu (1997). It is not possible to apply asymmetrical timeliness model to private firms because AT model incorporates stock returns as proxy for economic bad and good news. Instead of the relation between earning and stock returns in AT model, authors constructed some "asymmetrical timeliness" relation between accruals and cash flows (Ball and Shivakumar 2005).

AACF predicts a positive but asymmetrical correlation between accrual and cash flows that can be used to measure conditional conservatism. Positive relation is based on the idea that cash flows from a fixed asset likely to be persistent. Change in cash flows are expected to be followed by change in future cash flows in the same direction (increase or decrease). Accruals accomplish their role in this sense by the way of timely gain and loss recognition that is based on expected cash flows. Asymmetrical relation between cash flows and accruals arise because economic losses are recognized on a timelier fashion than economic gains. This asymmetrical relation entails that positive relation for economic losses are higher than economic gains. All of the arguments above related to the positive but asymmetrical relation between accrual and cash flows provides Ball and Shivakumar (2005) to construct the following model:

$$ACC_i = \beta_0 + \beta_1 DCFO_i + \beta_2 CFO_i + \beta_3 DCFO_i \times CFO_i + \varepsilon_i$$

where;

ACC_i : Accruals for the period that calculated as:

Operating accruals, measured as Δ Inventory + Δ Debtors + Δ Other Current Assets -   Δ Creditors + Δ Other Current Liabilities – Depreciation

$DCFO_i$: Dummy variable; 0 if $CFO_i > 0$ and 1 if $CFO_i < 0$

CFO_i : Cash flow from operations for the period.

Similar to the Basu (1997), β_3 is the measure for conservatism. A positive β_3 indicates the existence of conservatism in the sample. Ball and Shivakumar (2005) test their hypothesis on over than 100,000 British Firms from year of 1990 to 2000. Results of the study show that earnings quality which is measured with conditional conservatism is lower for private firms than for public firms. Authors note that this situation do not point out the sub-optimality but the lower demand for higher quality earnings in the market for private firms.

4. EMPIRICAL STUDIES ON ACCOUNTING CONSERVATISM

In this section leading and commonly cited studies on accounting conservatism are analyzed in order to provide an insight about the subjects that can be related to conservatism and about the usage of model for gauging conservatism. This section is designed as three parts. The relationship between various firm attributes and conservatism, conservatism in international context and change in conservatism in financial reporting over time are examined under each part respectively.

4.1. Empirical Studies on Conservatism and Various Firm Attributes

Application of conservatism in financial reporting is varying from firm to firm. Some empirical research have been made with the purpose of revealing the connection between conservatism and different firm attributes such as high tech – low tech firms, private-public firms, cross listed firms, employment of earnings management tools, ownership structure, board characteristics, internal control quality and cost of capital. Obviously the listed is not limited to these firm attributes. However, ones listed above are the most widely discussed subjects. Some of those studies which are published or presented in well known accounting journals or conferences are selected to be and tabulated in Table 1.

This review reveals that degree of conservatism adopted by firms is varying on different attributes of firms like technology used, publicly trading, ownership structure and cost of capital. There may be other attributes that may be in relation with conservatism. However these are chosen as they are more commonly discussed in the literature. When studies are overviewed thoroughly, it can be concluded contracting is the major determinant of conservatism in the context of firm attributes. Studies examined above are listed in the following.

Table 1.Summary of Empirical Evidence on Conservatism and Various Firm Attributes

Author(s)	Sample	Model(s)	Finding
Kwon et. al (2006)	U.S. 1990-1998	Basu (1997) Givoly- Hayn (2000)	High-tech firms exhibit a higher degree of conservatism.
Chandra (2011)	U.S. 1975-2006	Basu (1997) Givoly- Hayn (2000)	High-tech firms exhibit a higher degree of conservatism.
Ball –Shivakumar (2005)	U.K. 1990-2000	Ball- Shivakumar (2005)	Level of conservatism is higher in public firms than in private firms.
Nichols et. al (2009)	U.S. 1992-2002	Ball- Shivakumar (2005)	It is found that public banks prepare financial statements more conservatively than private banks.
Katz (2009)	U.S. 1978-2005	Basu (1997)	Private equity sponsorship enhances the level of conservatism.
Chen et. al (2010)	U.S. 1996-2005	Givoly and Hayn (2000)	There is a positive relationship between large shareholder ownership and accounting conservatism.
Ramalinge-gowda – Yu (2012)	U.S. 1995-2006	Basu (1997)	Institutional ownership increases conservatism in financial reporting.
LaFond-Roychowd-hury (2007)	U.S. 1994-2004	Basu (1997)	If managerial ownership is low, there is a higher demand for conservatism.
Bhattacharya (2003)	U.S. 1984-1998	Ball- Shivakumar (2005)	There is a negative relationship between earnings conservatism and cost of equity.
Francis et. al (2004)	U.S. 1975-2001	Basu (1997)	A weak relationship between earnings conservatism and cost of equity is observed.
Lara et. al (2006)	U.S. 1973-2003	Basu (1997) Penman- Zhang (2002)	There is a negative relationship between cost of equity and both balance sheet conservatism and earnings conservatism.
Ahmed et. al (2002)	U.S. 1987-1998	Beaver and Ryan (2000) Givoly and Hayn (2000)	Firms that adopt conservatism incur a lower degree of cost of debt.

4.2. Empirical Studies on Conservatism and International Differences

Another string of studies is performed on accounting conservatism within the international context. Researches try to figure out which country-based variations may result in different level of conservatism. It can be stated that institutional structure difference between countries cause accounting conservatism to change from country to country. This situation is

more apparent for legal system difference such as common law and code law countries. The influence of institutional factors is so dominant that adoption of same group of standards does not eliminate the cross country differences. Furthermore earnings management and income smoothing may increase the level of international difference in conservatism. International studies on conservatism are provided in Table 3.

Table 2. Summary of Empirical Studies on Conservatism and International Differences

Author(s)	Sample	Model(s)	Finding
Pope-Walker (1999)	UK - US 1976-1996	Basu (1997)	Difference between two countries in terms of conservatism is attributed to recognition of extraordinary items.
Ball – Kothari – Robin(2000)	Australia, Canada, UK, US, France, German, Japan 1985-1995	Basu (1997)	Common law countries exhibit a higher degree of conservatism than code law countries.
Giner – Rees (2001)	Germany, France, UK 1990-1998	Basu (1997)	There is a negative relation between investor protection and conservatism. Conservatism is lowest in France and highest in UK.
Raonic et. al (2004)	European firms 1987-1999	Basu (1997)	Cross listing force firms to embrace a higher degree of conservatism.
Lara et. al (2005)	1990-2000 Germany, France, UK	Basu (1997)	When discretionary accrual is extracted from earnings, difference between level of conservatism is higher and highest in UK.
Bushman- Piotroski (2006)	1992-2001 38 countries	Basu (1997)	Institutional factors such as legal system, political economy, and securities law and tax regime affect conservatism.
Jayaraman (2012)	1992-2001 27 countries	Basu (1997)	First enforcement of insider law increase conservatism.
Ball, Robin – Wu (2003)	1984-1996 Four East Asian countries	Basu (1997)	Institutional factors predominate accounting standards in application of conservatism.
Gassen et. al (2006)	1990-2003 23 countries	Basu (1997) Givoly and Hayn (2000)	Income smoothing and unconditional conservatism has a negative relation with conditional conservatism and income smoothing explains the cross country variation in conservatism.
Lara –Mora (2004)	1988-2000 Eight European countries	Basu (1997) Givoly and Hayn (2000)	Balance sheet conservatism is higher in code law countries and earnings conservatism is existence across all European countries but most apparent in UK.

4.3. Empirical Studies on Change in Conservatism over Time

Change in the degree of conservatism adopted in financial reporting through time is another fruitful area of study that attracts researchers. It is investigated whether any increase or decrease can be observed and what factors may have caused such a change. For instance application of IFRS is one of those factors that may have an impact on conservatism when pre- and post- adoption periods are analyzed. Some academicians (that are cited below) attribute change in conservatism to measurement errors. They suggest that incorrectly applied models may result in false conclusion (observation of change in level of conservatism even no change happened).

When the studies within this scope are analyzed as a whole, it can be noted that results are mixed for variation in conservatism over time. Although some important studies have concluded that there is an increase in level of conservatism, this can be attributed to measurement errors. Additionally it is hard to state that IFRS adoption has an apparent effect because there is no consistent evidence in literature. As these are early evidences on IFRS adoption, probably it is not surprising to obtain these kinds of results. More research should be performed in both areas in order to strengthen the reliability of the evidences. Studies within this category are given in Table 3.

Table 3. Summary of Empirical Studies on Change in Conservatism over Time

Author(s)	Sample	Model(s)	Finding
Basu (1997)	US 1963-1989	Basu (1997)	Increase in conservatism is observed that can be explained by increased auditors' legal liability.
Givoly – Hayn (2000)	US 1950-1998	Givoly and Hayn (2000)	There is an increase in conditional conservatism. However increase in unconditional conservatism is not clear.
Grambovas et. al (2006)	EU - US 1989-2004	Basu (1997)	There is an increase in conservatism in both EU firms and US firms.
Givoly et. al (2007)	U.S Simulated data 1951-2001	Basu (2007) Beaver and Ryan (2000) Givoly and Hayn (2000) Penman and Zhang (2002)	Conditional conservatism is more apparent than previously reported.

Huang et. al (2008)	US 1976-2005	Basu (1997) Ball and Shivakumar (2005)	Level of conservatism is not as high as previously reported and no significance increase in conservatism is detected.
Brouwer (2008)	European countries 1991-2005	Basu (1997) Givoly and Hayn (2000)	There is no increase in conditional and unconditional conservatism is observed.
Hung- Subramanyam (2007)	1998-2002 Germany	Basu (1997)	No significant difference in level of conservatism is determined after adoption of IFRS.
Kaytmaz Balsari – Özkan – Durak (2010)	1992-2008 Turkey	Basu (1997)	IFRS adoption enhanced conservatism in financial reporting.
Karampinis-Hevas (2011)	2002-2007 Greece	Basu (1997)	No significant difference in level of conservatism is determined after adoption of IFRS.
Andre – Filip (2012)	2002-2007 16 European countries	Basu (1997)	There is an increase in conservatism after adoption of IFRS.

5. CONCLUSION

Accounting conservatism is one of the most ancient and debatable concepts in accounting. While some academicians defend its existence, there are also opponents of conservatism due to introduction of bias into accounting information. Advocates suggest that conservatism prevents the opportunistic behavior of financial statement preparers. Empirical studies on this topic accelerated after the seminal work of Basu (1997) that provides a good measurement model. Among this high number of studies, most commonly cited studies are selected in order to prepare the literature review. These studies are categorized into three groups. In the first group studies that examines the relationship between conservatism and various firm attributes are investigated. Then international studies on accounting conservatism are discussed and lastly studies on change in accounting conservatism over time are examined. Through this literature review, it is inferred that there is a lack of interest on this highly debatable concept in Turkey. Especially contracting role of accounting conservatism that can be analyzed in many aspects needs to be examined for Turkish case. Additionally exclusion of conservatism (prudence) from International Accounting Standard Board's Framework comes out as an attractive research question to be analyzed. Appropriateness of this decision may be discussed through empirical research methods.

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