
DOES MANDATORY IFRS ADOPTION IMPROVE FINANCIAL REPORTING QUALITY? EMPIRICAL EVIDENCE FROM AN EMERGING ECONOMY

Dr. Gulhan Suadiye*

Mustafa Kemal University
IIBF., Tayfur Sokmen Kampusu
31040, Hatay, TURKEY

ABSTRACT

This study examines whether the mandatory adoption of International Financial Reporting Standards (IFRS) improves financial reporting quality in Turkey. To examine whether mandatorily adoption of IFRS improve financial reporting quality, I measure and compare financial reporting quality for listed Turkish firms before and after adopting IFRS. I use four indicators, namely, earnings smoothing, managing earnings toward targets, timely loss recognition and value relevance as proxies for financial reporting quality. I find that firms applying IFRS exhibit more likely to smooth earnings and manage earnings towards a target and engage in less timely recognition of losses but more value relevance, namely, a higher association of book value and earnings with share prices compared to firms applying Turkish GAAP. The findings of this study indicate that switching to IFRS does not improve financial reporting quality expect value relevance in Turkey.

Keywords: *International Financial Reporting Standards (IFRS), financial reporting quality, earnings smoothing, timely loss recognition, value relevance*

* Mustafa Kemal University, Faculty of Economic and Administrative Sciences, Department of Accounting and Finance, 31040, Hatay, TURKEY.

1. Introduction

The International Accounting Standards Board (IASB) has focused on developing a single set of high quality financial reporting standards to meet the increasingly need for high quality, transparent and comparable financial information in international markets, since it was founded in 2001 as the successor body to the *International Accounting Standards Committee (IASC)*. These reporting standards are known as the International Financial Reporting Standards (IFRS) which have been becoming the most commonly accepted global standards for the preparation of public company's financial statements. To date, there are approximately 140 nations and reporting jurisdictions permit or require IFRS for domestic listed companies, and approximately 100 countries have fully conformed to IFRS (IFRS website, 2016; Deloitte Touche Tohmatsu, 2015; PWC website, 2015). All member states of the European Union (EU) are required to use IFRS for listed companies since 2005. Furthermore, all other major economies have initiated a process to consider convergence or adoption of IFRS in the near future. Turkish listed firms are also required to use IFRS in the preparation and presentation of consolidated accounts since 2005.

IASB stated that IFRS have been developed to ensure a better presentation of entities' economic position and performance by disclosing relevant, understandable, comparable and timely financial information. Therefore, it is expected to increase financial reporting transparency and quality of financial reporting by adopting IFRS. Accounting standards setters, business communities and regulatory bodies around the world have proposed some potential economic benefits by adopting IFRS worldwide. The proponents of IFRS have expressed that disclosure under internationally recognized accounting standards would help to reduce technical barriers caused by national accounting differences. Adopting IFRS globally facilitate cross-border comparability and understandability and enable stakeholders to make economic decision efficiently. Hence, widespread IFRS adoption would improve competition and efficiency in the allocation of resources, increase the mobility of capital and liquidity, decrease the cost of capital of firms and positively change business environment (UNCTAD, 2005; IASB, 2008; Levitt, 1998; Street et al., 1999; Leuz and Verrecchia, 2000; Leuz, 2003; Daske, 2006; Daske et al., 2008; Brown, 2011).

Many researches have already provided some evidence about the economic consequences of accounting quality such as reducing cost of capital, increasing international mobility of capital and efficiency of capital markets (Young and Guenther, 2002; Leuz and Verrecchia, 2000; Sun, 2006; Bushman et al., 2010). Nevertheless, there are also considerable discussions in international accounting literature regarding the impact of IFRS on the quality of financial information (e.g., La Porta et al., 1998; Ball et al., 2000, 2003; Leuz, 2003; DeFond and Hung, 2004; Ball and Shivakumar, 2005; Ball, 2006; Burghstahler et al., 2006; Christensen et al., 2008; Tang et al., 2008; Bruggemann et al., 2013; Kim and Shi, 2014). Ball (2006) expressed that although it is generally accepted that IFRS is a set of high quality accounting standards, this does not imply that once a country adopts IFRS it will produce high quality financial reporting. According to Ball et al. (2003), high quality standards are a necessary condition, but not a sufficient condition for high quality information. Market demands for accounting information, institutional settings, legal systems and firms' incentives dominate accounting standards in determining accounting quality.

Despite following similar methodology, many studies report mixed empirical results about the effectiveness of IFRS on the quality of financial reporting (e.g., Dechow et al., 2003; Dechow and Dichev 2002; Leuz et al., 2003; Kothari et al., 2005; Lang et al., 2006; Kim and Shi, 2007; Hail and Leuz, 2007; Jones et al., 2008; Daske et al., 2008; Barth et al., 2008). Most of research in accounting literature regarding to usefulness of

IFRS/IAS have conducted for USA, European Countries, and other developed countries (e.g., Van Tendeloo and Vanstraelen, 2005; Lang et al., 2006; Goodwin et al., 2008; Jeanjean and Stolowy, 2008; Barth et al., 2008; Callao and Jerne, 2010; Chen et al., 2010; Zeghal et al., 2012; Ahmed et al., 2013; Martinez-Ferrero, 2014; Bryce et al., 2015), and few researches conducted in developing countries. (e.g., Suadiye, 2012, Alali and Foote, 2012; Uyar, 2013; Ismail et al., 2013; Pelucio-Grecco et al., 2014). The contradictory results of the existing studies about IFRS make every research valuable to understand and evaluate the usefulness of IFRS from experience of countries, especially from developing countries that have already adopted IFRS. Inconsistent and contradictory results in the literature can be explained by the fact that different politic, economic and legal systems which effect accounting system and its output. Accordingly, since every single country has its own economic, politic and sociological factors, the results of accounting quality studies could certainly vary across countries. In this respect it would be beneficial to conduct the research in Turkey in order to provide insights into the issue of international convergence of accounting standards and benefits after passing so many years since IFRS has been adopted.

As mentioned above the mandatory adoption of IFRS for Turkish public companies has started since 1 January 2005. Consistent with general perspective, it is expected some economic benefits from mandatory IFRS adoption such as improving the quality of financial information, facilitating investment and credit decisions for investors and hence increasing in capital inflow and reducing cost of capital. The adoption of IFRS in Turkey since 2005, gives a unique set to empirically explore the impact of IFRS on the quality of financial reporting in a developing country.

Accounting quality is reported as a broad concept with multiple dimensions in international accounting literature (e.g., Dechow et al., 2003; Leuz et al., 2003; Lang et al., 2003, 2006; Kothari et al., 2005; Barth et al., 2008; Christensen et al., 2008; Jones et al., 2008; Dechow et al., 2010). To examine the effect of IFRS adoption on accounting quality in Turkey, I empirically test four dimensions of accounting quality that have been widely used in prior studies: earnings smoothing, managing earnings toward targets, timely loss recognition and value relevance. I use 2041 firm- year observations for 157 Turkish non-financial companies which were listed on the Istanbul Stock Exchange from 1999 to 2015. I investigate whether IFRS adoption improve accounting quality by comparing results obtained for firms which operated between 1999 and 2002 with those obtained for concerning firms operated between 2005 to 2015. Empirical results show that implementing IFRS has not impact on improving accounting quality in Turkey. The results of this study indicate that firms using IFRS are more likely to smooth earnings and manage earnings towards a target and less likely to recognize large losses in time. As for value relevance tests, results highlight that IFRS adoption increases value relevance of accounting amounts. In particular, value relevance analysis indicates that combined book value and earnings improve their ability to explain stock prices after IFRS adoption. This can be interpreted book value and earnings amounts reported under IFRS more informative for investors comparing to those reported under Turkish local GAAP.

The expectation of this study is to make some contributions to the international accounting literature regarding to usefulness of IFRS and gives insight to accounting quality in Turkey. The results of this study provide additional evidence to the literature by concentrating on adoption of IFRS and accounting quality in a single developing country, as most of the existing studies relating to the usefulness IFRS on accounting quality have been conducted on data from the U.S and developed countries. The results of this study may also encourage Turkish regulators and standard setters to enforce more strict regulations to improve

transparency environment and the quality of financial reporting in Turkey. In addition to that, the empirical evidence of this study might force Turkish authorities to take more serious actions to improve the efficiency of Turkish capital market and to integrate into the world financial system.

The rest of this paper is organized as follows: The next section reviews prior literature about IFRS and accounting quality. Section 3 illustrates developing hypothesis and research design. Section 4 presents sample selection and descriptive statistics. Section 5 shows empirical results and a brief conclusion is provided in Section 6.

2. Accounting quality and IFRS: Related Literature

2.1. Accounting quality and IFRS

In May 2008, The IASB published an Exposure Draft ‘An improved Conceptual Framework for Financial Reporting’ [ED] which sets out the objective of general purpose financial reporting and qualitative characteristics of useful information (IASB, 2008). According to this conceptual framework, “The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an entity that is useful to a wide range of users in making economic decisions. The application of objectives and qualitative characteristics should lead to high quality accounting standards, which in turn should lead to high quality financial reporting information that is useful for decision making” (IASB, 2008). IASB does not present a definition of accounting quality but describes in Exposure Draft, high quality financial reporting as the basic attributes of information used in the capital markets (i.e the fundamental characteristics- relevance and faithful representation- and the enhancing qualitative characteristics- understandability, comparability, verifiability and timeliness-). According to Exposure Draft, if financial information is to be useful, it must be relevant and faithfully represents what it purports to represent. The usefulness of financial information is enhanced if it is comparable, verifiable, timely and understandable (IASB, 2008, Framework, para. 24 and follows).

Ball (2006) expressed that high quality financial reporting information requires: accurate depiction of economic reality; low capacity for managerial manipulation; timeliness (all economic value added gets recorded eventually; the question is how promptly); and asymmetric timeliness (a form of conservatism): timelier incorporation of bad news, relative to good news in the financial statements. To measure the impact of IFRS on accounting quality, recent literature focus on the characteristic that are believed to influence quality of financial reports. Many researchers have used various proxies such as accruals, variability of earnings, timeliness and value relevance to measure the quality of financial reporting (e.g. Amir et al., 1993; Dechow et al., 1995; Healy and Wahlen, 1999; Dechow and Dichev, 2002; Dechow et al., 2003; Leuz et al., 2003; Van Tendeloo and Vanstaelen, 2005, Lang et al., 2003, 2006; Hung and Subramanyam, 2007; Barth et al., 2008; Christensen et al., 2008; Paananen, 2008; Chen et al., 2010).

2.2. Related literature

International academic literature gives some excellence review studies about on the impact of mandatory and voluntarily adoption of IFRS (e.g. Soderstrom and Sun, 2007; Hail et al., 2010; Brown, 2011; Bruggemann et al., 2013; ICAEW, 2014, Leuz and Wysocki 2016). This section summarizes some researches especially those that used earnings management, timeliness and value relevance metrics as proxies of accounting quality.

Eccher and Healy (2000) examine the usefulness of IAS using a sample of firms provide financial reports under both IAS and Chinese accounting standards. They find that information produced under IAS is no more useful than that prepared under Chinese accounting standards. Van Tendeloo and Vanstaelen (2005) examine whether voluntary IFRS adoption lower earning management using a sample of German firms from 1999 to 2001. They find no differences in earnings management behavior between German firms that voluntarily adopted IFRS and German firms reporting under German GAAP. Bartov et al., (2005) examine 416 German listed firms reporting under German GAAP, US-GAAP and IFRS from 1998 to 2000. They explore earnings produced under US-GAAP or IAS has higher value relevance than earnings produced under German GAAP. Similar findings are obtained by Jermakowicz et al., (2007) for DAX-30 firms from 1995 to 2004. Their findings show that adopting IFRS or US GAAP or cross-listing on NYSE increases significantly the value relevance of earnings relative to market prices. In contrast, Hung and Subramanyam (2007) show that no significant difference in the value relevance of book value and earnings between IFRS and German GAAP by comparing financial statements prepared under German GAAP and under IFRS between 1998 and 2002. Goncharov and Zimmermann (2006) investigate the level of earnings management differs between consolidated accounts of German companies prepared under three different accounting standards; German GAAP, IAS and US GAAP. They find that the level of earnings management under US GAAP is significantly lower, while the level of earnings management under German GAAP and IAS is almost equal. Christensen et al., (2008) investigate the impact of incentives on accounting quality changes around IFRS adoption for German firms that voluntarily adopt IFRS between 1998 and 2004 and firms postponed IFRS adoption until it becomes mandatory in 2005. They find that voluntary adopters have less incentive to engage in earnings management and recognize losses more timely. In contrast, they find no accounting quality improvements for firms that resist IFRS until 2005. Paananen (2008) assess accounting quality for Sweden publicly listed firms adopting IFRS voluntarily in the period 2002-2004 and for those mandatorily adopting IFRS in the period 2005-2006. They find that financial reporting quality has decreased after the mandatory adoption of IFRS. Jeanjean and Stolowly (2008) examine the effects IFRS adoption on earnings management by using 1,146 firm year observations from Australia, UK and France from 2005 to 2006. They report that earnings management did not decrease after IFRS adoption, and even increased in France. Chua et al., (2012) compare accounting quality in Australia before and after IFRS adoption using a sample 1,376 fir-year observation for 172 Australian listed firms. They concluded accounting quality has improved after IFRS adoption. Barth et al., (2008) examine whether application of International Accounting Standards (IAS) is associated with higher accounting quality using a large worldwide sample of firms adopting IAS voluntarily from 21 countries for the years 1994 to 2003. Their results show that IAS firms exhibit less earnings managements, more timely losses recognition, and higher value relevance than do matched sample of firms using non-US domestic accounting standards. They conclude that there is an improvement in accounting quality after voluntary IAS adoption. Chen et al., (2010) compare the accounting quality of publicly listed companies in 15 member states of European Union before and after IFRS adoption. They find less of managing earnings towards a target, a lower magnitude of absolute discretionary accruals, and higher accruals quality after IFRS adoption. But they find also firms engage in more earnings smoothing and recognize large losses in a less timely manner in post-IFRS periods. Zeghal et al., (2012) analyze whether the mandatory adoption of IFRS is associated with higher accounting quality using a sample of 1547 companies from 15 EU countries between 2002 and 2007. Their results show that the mandatory adoption of IFRS is associated with less earnings smoothing, less managing toward a target, a decrease in absolute discretionary accruals and an increase in accruals quality, implying a higher earnings quality. In contrast, Ahmed et al., (2013) find no evidence of accounting quality improvement in benchmarking group

from 20 countries where IFRS adopted in 2005. Instead of benchmark firms they find that IFRS firms exhibit increases in income smoothing and less timely loss recognition. Ismail et al., (2013) investigate the effect of mandatory adoption of IFRS on earnings quality in Malaysia using 4010 firm-year observations. They found that earnings reported during the period after the adoption of IFRS is associated with lower earnings management. Uyar (2013) investigate accounting quality in Turkey using a sample of 208 publicly listed companies for the years 2002 and 2007. He finds less earnings management practices after IFRS adoption.

Overall, the results of prior empirical studies about the effectiveness of accounting standards on accounting quality are mixed. One explanation for these inconsistent results is about the proxy measures and different methods which are used in the empirical analyses. According to this the methods used in prior studies are not be enable to assess comprehensively financial reporting quality including all qualitative characteristics as defined in the Conceptual Framework of the IASB (IASB, 2008), as they focus on some specific attributes of financial reporting information. Other explanations are attributes to possible sample heterogeneity and to the self-selection bias due to the incentive of voluntarily IFRS adopters. Cross-country studies might produce biased findings as they rely on assumption that countries share the same politic, economic and cultural environment. Furthermore, the findings studies that investigate voluntary IFRS firms can suffer from possible sample selection as voluntary IFRS firms perceive some advantages adopting IFRS.

3. Hypothesis Development and Research Design

The main purpose of this study is to examine whether the mandatory adoption of IFRS leads to improvements in financial reporting quality in Turkey. To examine the impact of IFRS on financial reporting quality I measure and compare financial reporting quality before and after adopting IFRS in Turkey. Following Lang et al., (2006) and Barth et al., (2008), I use earnings management, timely loss recognition and value relevance as proxies of accounting quality. These proxies are analyzed by data prepared and reported under Turkish GAAP from 1999 to 2002 with those prepared and reported under IFRS from 2005 to 2015.

3.1. Hypotheses Development

Healy and Wahlen (1999 p. 368) define earnings management as “an attempt to manage earnings to either mislead some shareholders about the underlying economic performance of the company, or to influence contractual outcomes that depends on reported accounting numbers” According to Davidson et al., (1985), earnings management is the process of taking deliberate steps within the constraint of generally accepted accounting practice to bring about a desired level of reported earnings. Managers try to keep the figures relatively stable by adding and removing cash from reserve accounts rather than having years of exceptionally good or bad earnings for the purpose of income smoothing. Managing earnings and this causes deteriorations in quality of accounting.

Accounting applications, due to its nature, give substantial discretion to managers in preparing financial reports. The applications of this discretion (such as discretionary accruals) allow managers to convey information to outside investors, and keep information private for competitive reasons. Using discretions deliberately to influence capital providers in making economic decision lead to the manipulation of financial data hence deteriorates earnings quality. Ashbaugh and Pincus (2001) suggest that restrictions accounting alternatives would limit management’s opportunistic discretion in determining accounting numbers. To

examine this suggestion, Ewert and Wagenhofer (2005) developed a model and this model shows that limiting opportunistic discretions in accounting earnings results in more reflective of a firm's underlying economics and, therefore, is of higher quality of earnings. Like Ashbaugh and Pincus (2001), Barth et al., (2008) suggest that accounting quality could increase if accounting standards limit management's opportunistic discretion in determining accounting amounts, and also could increase because of changes in the financial reporting system contemporaneous with firms' adoption of IAS, for example, more rigorous enforcement. Similar to Lang et al., (2006) and Barth et al., (2008), I predict that earnings reported under IFRS are of higher quality than those reported under domestic standards. I hypothesize, in alternative form:

Hypothesis 1: Firms that adopt IFRS engage significantly less in earnings management compared to firm that adopt Turkish local GAAP.

The second dimension of accounting quality is timely loss recognition, which is strictly related to earnings smoothing. Earnings are supposed to be of high quality if large losses are recognized in timely manner rather than postponed to do future period. (Ball et al., 2000; Lang et al., 2003, 2006, Leuz et al., 2003) This is closely related to earnings smoothing. If earnings are smoothed large losses should be relatively rare. Many researchers have related earnings management to conservatism issue. White et al., (2003) define earnings quality as the degree of conservatism in a firm's reported earnings. Accounting conservatism is traditionally defined as "anticipate no profit, but anticipate all losses (Bliss, 1924). Watts (2003, p.2) defines conservatism as the asymmetrical verification requirements for gains and losses. He emphasizes differential verification as the fundamental of principle of conservatism. The greater the difference in degree of verification required for gains versus losses the greater the conservatism and this asymmetric treatment understate a firm's net assets values. This interpretation was also used by Basu (1997). Basu's study (1997) demonstrates how the asymmetric recognition used in accounting results in systematic differences in the timeliness and persistence of earnings. In particular, earnings smoothing causes large losses to be relatively rare, so that timely loss recognition can be measured in terms of willingness of managers to recognize large losses as they occur rather than spread their effects over multiple periods (Lang et al., 2006; Barth et al., 2008). In addition, timely loss recognition is also related to the higher degree of verification for recognizing good news (or positive economic performance) compared to that used for recognizing bad news (or negative economic performance) in earnings (Basu, 1997). In general, an increase in timely loss recognition is associated with increasing accounting quality. Consequently, large losses that are recognized in a timely manner expected to improve earnings quality. I hypothesize, in alternative form:

Hypothesis 2: Firms that adopt IFRS are more likely to recognize losses in a timely manner compared to firms that adopt Turkish local GAAP.

The last dimension of accounting quality that tested in this study is value relevance. If financial information is to be useful, it must be relevant and faithfully represent what it purports to represent according to IASB (2008). It is assumed that when changes in accounting information correspond to changes in market value of the firm, earnings information provides relevant and reliable information (Nichols and Wahlen, 2004). Value relevance means the ability of financial statement information to capture and summarize firm value. It is measured as the statistical association between financial statement information and stock market values or returns (Francis and Schipper, 1999). Accordingly, accounting information under IFRS would be more value relevant as IFRS require faithfully representing a firm's underlying economics and assumed to be a higher association between firms underlying economics and stock prices. Thus I hypothesize, in alternative form:

Hypothesis 3: Accounting numbers prepared under IFRS exhibit higher value relevance than accounting number prepared under Turkish local GAAP.

3.2. Earnings management measures

To test first hypothesis, I focus on two dimensions of earnings management: earnings smoothing and managing towards positive earnings. As a metric of earnings smoothing, I use the variability of annual changes in net income scaled by total assets (Leuz et.al., 2003; Lang et al., 2003, 2006). Lower values of the variability of the changes in net income suggest being evidence of increasing earnings smoothing. To measure the variability of annual changes in net income: first, I calculate the change in net income scaled by total assets for GAAP firms and IFRS firms². Second, following Ashbaugh and Pincus, (2001), Lang et al., (2006) and Barth et al., (2008), I estimate the regression of the change in net income scaled by total assets on variables identified in prior studies as control variables. Then I use the residuals from that regression as a measure of the variability of changes in net income. Thus, the variance of the change in net income is the variance of residuals from a regression of change in net income scaled by total assets. Hence, a smaller variance of the change in net income is evidence of earnings smoothing. The estimated regression model is below:

$$\Delta NI_{it} = \alpha_0 + \beta_1 SIZE_{it} + \beta_2 GROWTH_{it} + \beta_3 EISSUE_{it} + \beta_4 DISSUE_{it} + \beta_5 LEV_{it} + \beta_6 TURN_{it} + \varepsilon_{it} \quad (1)$$

Where:

ΔNi is the annual change in net income, scaled by end-of-year total assets; $SIZE$ is the natural logarithm of the end-of-year market value of equity; $GROWTH$ is the annual change in sales; $EISSUE$ is the annual change in common stock; $DISSUE$ is annual change in total liabilities; LEV is end-of-year total liabilities divided by book value of equity; $TURN$ is sales divided by end-of-year total assets.

Managing towards positive earnings is the second metric for earnings management. It is measured as a coefficient on small positive net income (SPOS). The coefficient value of SPOS is estimated by the regression given below (Burgstaller and Dichev, 1997; Leuz et al., 2003; Barth et al., 2008):

$$IFRS(0,1) = \alpha_0 + \beta_1 SIZE_{it} + \beta_2 GROWTH_{it} + \beta_3 EISSUE_{it} + \beta_4 DISSUE_{it} + \beta_5 LEV_{it} + \beta_6 TURN_{it} + \beta_7 SPOS_{it} + \varepsilon_{it} \quad (2)$$

Where:

IFRS (0,1) is an indicator variable that equals one for firms applying IFRS i.e., those operating in the post-adoption period (2005-2015), and zero otherwise and SPOS is an indicator variable that equals one if net income scaled by total assets is between 0.00 and 0.01, and zero otherwise (Lang et al. 2003). A negative coefficient on SPOS indicates that firms applying Turkish local GAAP are manage earnings more frequently towards a small positive net income compared to those applying IFRS.

² $\Delta NI_{it} = (NI_t - NI_{t-1}) / (TA_t - TA_{t-1})$ Where, ΔNI is the change in net income scaled by year-end total assets (TA).

3.3. Timely loss recognition measures

To test second hypothesis, I measure timely loss recognition as a coefficient on large negative net income (LNEG). The coefficient value of LNEG is estimated by the regression following (Lang et al., 2003, 2006; Barth et al., 2008):

$$IFRS(0,1) = \alpha_0 + \beta_1 SIZE_{it} + \beta_2 GROWTH_{it} + \beta_3 EISSUE_{it} + \beta_4 DISSUE_{it} + \beta_5 LEV_{it} + \beta_6 TURN_{it} + \beta_7 LNEG_{it} + \varepsilon_{it} \quad (3)$$

Where:

LNEG is an indicator variable that equals one if annual net income scaled by total assets is lower than -0.20, otherwise is 0. A positive coefficient on LNEG indicates that large losses are recognized more frequently in IFRS financial statements compared to GAAP ones.

3.4. Value Relevance Measures

Regarding third hypothesis, I estimate the value relevance of earnings and book value. Value relevance metric is based on explanatory power adjusted R^2 from the regression of stock price on earnings and book value:

$$P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVPS_{it} + \varepsilon_{it} \quad (4)$$

In addition to the relative explanatory power that both earnings and book value have for stock prices the following two equations also are used.

$$P_{it} = \beta_0 + \beta_1 EPS_{it} + \varepsilon_{it} \quad (5)$$

$$P_{it} = \beta_0 + \beta_1 BVPS_{it} + \varepsilon_{it} \quad (6)$$

Where:

P_{it} is the stock price per share for firm i at time t , six months after the fiscal year's end of time t ; EPS_{it} is the earnings per share of firm i at time t ; $BVPS_{it}$ is the book value per share of firm i at time t ; t is 1999-2002, corresponding to the years 2005-2015; ε_{it} is other value relevant information. Consistent with the recommendations of Kothari and Zimmerman (1995) and Lang et al., (2006), to reduce heteroscedastic disturbances and scaling effects, I regress the market price of shares as of six months after year-end (hereafter P) on earnings per share and (hereafter EPS) and book value of equity per share (hereafter BVPS).

4. Sample Selection and Descriptive Statistics

The empirical analysis has been carried out on a sample of 2041 firm-year observations for 157 firms that have shares listed on Istanbul Stock Exchange. The observations based on financial statement and capital market data from the beginning of 1999 to 2015 obtained from by Public Discloser Platform and Istanbul Stock Exchange database. As Turkish listed firms have been preparing and presenting consolidated financial statements under IFRS from the beginning of 2005, I consider the IFRS period between 2005-2015 (Post-adoption period). The pre-adoption period consisted from 1999 and 2002 which is Turkish listed firm used local Turkish GAAP. 2003 and 2004 years excluded because these years are considered as a transition

period with special regulations and economic circumstances that effect financial statement data. Facing high inflation for years raised concern in Turkish public about the usefulness of financial statements of entities. High inflation for years eroded and made dysfunctional accounting amounts in Turkey. In 2003, Turkish regulatory bodies issued regulations which are required to adjust for the effect of inflation in the financial statements and bring amounts up to date. Before 2003 financial statements prepared and reported under the local Turkish GAAP which is based on historical cost accounting. And most firms that using Turkish GAAP tried to benefit from the incentives in the Turkish Tax Regulation negating the effect of inflation. In 2004, it made some more regulations about appraisal which considered in preparing 2004 financial statements. Furthermore in 2004, Turkish regulators passed regulation that lops six zeros off the Turkish currency (Lira) being effective from January 1, 2005. Thanks to more serious and strict economic measures taken after the 2000-2001 financial crisis, Turkish economy had begun to show more stability, economic indicators started to be normal, inflation rate decreased to reasonable number. After these positive economic developments, mandatory application of inflation accounting for financial statements was terminated in 2005. This year, 2005, is also the year in which mandatory implementation of IFRS for preparing financial reports started to listed firms. Consequently, I exclude the 2003 and 2004 years from the sample, since, as a mentioned above, Turkish listed firm prepared 2003 and 2004 financial statements under the different situations and furthermore, 35 Turkish listed firms started voluntarily preparing their financial reports in accordance with IFRS.

I construct a matching sample procedure and excluding observations with missing data on firm's equity, sales, common stock shares, total liabilities, total assets and/or net income. For example if IFRS firm has data from 1999 through 2013 or only from 2005 through 2015 or only from 2000 to 2010, I excluded from analysis. Moreover, I have to remove financial companies which are perform on banking, insurance and factoring sector from the sample because of two reason: First, banks, insurance and factoring companies prepare financial reports accordance with Turkish Banking Regulation and Supervision Agency Regulations alongside IFRS and they are primarily and severely affected from 2000 and 2001 financial crises. Second, the main aim of this study is to investigate the effects IFRS on financial reporting quality. As a result, the sample consist from the same set of 157 firms which have data for pre adoption (1999-2002) and for post adoption IFRS (2005-2015). The sample to test earnings management and timely los recognition metrics comprise 471 firm-year observation for pre-adoption IFRS and 1570 firm-year observation for post-adoption IFRS. And to test value relevance metrics the sample comprise 471 firm-year observation for pre-adoption IFRS and 1724 firm-year observation for post-adoption IFRS.

Table 1 presents descriptive statistics relating to variables uses in analysis which are computed separately for firms reporting under Turkish local GAAP and under IFRS. Table 1 reveals that IFRS causes significant change in all test and control variables. In terms test variables IFRS firms have significantly higher incidents of chance in annual net income (ΔNI), small positive earnings (*SPOS*) and large negative earnings (*LNEG*) than do GAAP firms. These results suggest that IFRS firms are more likely to smooth earnings and manage earnings toward a target and less likely to recognize in a timely manner. Although these descriptive statistics don't control for other factors, IFRS firms seems to manage earnings more than then do firms that adopt Turkish local GAAP. IFRS firms are significantly larger in size and more likely to issue debt and equity than firms adopted GAAP. Moreover, IFRS firms have higher growth and more highly sales and leveraged than firms adopted local GAAP. As for test variables used to measure value relevance descriptive statistics document that the variability of market prices (P), earnings per share (EPS) and the book value per share (BVPS) significantly increase under IFRS.

Table 1 Descriptive statistics relating to test and control variables used in analysis.

5. Test Variables	Turkish Local GAAP (N=157)			IFRS (N=157)		
	Mean	Median	Std.Dev.	Mean	Median	Std.Dev.
ΔNI	-0.0014	-0.0051	0.1442	0.0004	0.0002	0.0953
SPOS	0.0425	0.0000	0.2019	0.0688	0.0000	0.2532
LNEG	0.0658	0.0000	0.2482	0.0134	0.0000	0.1149
P	3.6990	3.6767	0.4964	16.789	3.5100	71.091
BVPS	7.4439	2.8353	36.5012	8.0414	3.1611	24.653
EPS	0.5899	0.2674	5.6619	0.8606	0.2240	4.6728
SIZE	10.669	10.543	0.6959	8.3495	8.3012	0.7189
GROWTH	0.8268	0.4873	5.8339	29108.44	0.1002	995547.8
LEV	3.1001	1.1202	24.783	-3.41643	0.7590	179.628
EISSUE	1.1295	0.0000	3.3042	0.2749	0.0000	2.3640
DISSUE	0.5875	0.4486	0.8299	0.2791	0.1288	1.2028
TURN	1.9410	0.9994	10.663	0.8938	0.8122	0.5711

Definition of variables:

ΔNI is the change in annual net income scaled by total assets; *SPOS* is an indicator variable that equals one if net income scaled by total assets is between 0 and 0.01; *LNEG* is an indicator variable set to one for observations for which annual net income scaled by total assets is less than -0.20 and zero otherwise; *P* is the stock price per share as six months after the fiscal year's end; *BVPS* is the book value per share of equity; *EPS* is the earnings per share; *SIZE* is the natural log of end of year market value of equity; *LEV* is end of year total liabilities divided by end of year total equity book value; *GROWTH* is percentage change in sales; *EISSUE* is percentage change in common stock; *DISSUE* is percentage change in total liabilities; *TURN* is sales divided by end-of-year total assets.

Empirical Results

This section summarizes the results of deriving from the empirical analysis. I use Eviews 8.1 to estimate regression models. Table 2 exhibits the variance of residuals from a regression of the ΔNI on the control variables. The regression of ΔNI is estimated by the fixed effects general least square (GLS) method to control for potential firm-specific omitted variables and to reduce heteroscedasticity problems. The results show that IFRS firms have significantly less variability of change net income compared to firms that adopt local GAAP. The estimation results reveal that adopting IFRS appear to be more likely to smooth earnings compared to firms using local GAAP.

Table 2 The variability of annual changes in net income as the variance of residuals from a regression of the ΔNI

Test for Equality of Variances			
	Observations	Variance	Std. Dev.
GAAP firms	471	0.0170	0,130557
IFRS firms	1570	0.0088	0.093675
Method	df	Value	Probability
F-test	(1569, 470)	2.290603	0.0000
Siegel-Tukey		7.349430	0.0000
Bartlett	1	141.3709	0.0000
Levene	(1, 2039)	62.87670	0.0000
Brown-Forsythe	(1, 2039)	62.54362	0.0000

Table 3 and 4 presents the logit regression results for coefficients of SPOS and LNEG. The coefficient of SPOS is positive (0.66) but insignificant, while the coefficient of LNEG is negative (-4.10) and statistically significant. Positive coefficient on SPOS would indicate that IFRS-adopting firms report a small positive net income more frequently than local GAAP-adopting ones, but it is not statistically significant. The negative and significant coefficient of LNEG suggests that firms are less likely to recognize large losses under IFRS. The results of analysis on coefficient of SPOS and LNEG and smoothing earnings provide evidence that adopting IFRS increase earnings management practices. Adopting IFRS mandatorily seems to increase the discretionary power used by managers in reporting earnings.

Table 3 Logit Analysis of IFRS Adoption and Small Positive Earnings

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	47.48722	2.518880	18.85251	0.0000
SIZE	-4.693205	0.252531	-18.58464	0.0000
GROWTH	1.14E-07	3.41E-08	3.349564	0.0008
LEV	-0.009778	0.007789	-1.255251	0.2094
EISSUE	-0.076707	0.033986	-2.257007	0.0240
DISSUE	-0.388484	0.064982	-5.978309	0.0000
TURN	-0.906187	0.239888	-3.777544	0.0002
SPOS	0.662075	0.636130	1.040785	0.2980
McFadden R-squared	0.811183	Mean dependent var.		0.769231
S.D. dependent var	0.421428	S.E. of regression		0.181463
Obs with Dep=0	471	Total obs		2041
Obs with Dep=1	1570			

Table 4 Logit Analysis of IFRS Adoption and Large Negative Earnings

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	47.52164	2.525062	18.81999	0.0000
SIZE	-4.681324	0.251126	-18.64133	0.0000
GROWTH	1.34E-07	3.14E-08	4.285228	0.0000
LEV	-0.013534	0.017195	-0.787079	0.4312
EISSUE	-0.081725	0.032963	-2.479292	0.0132
DISSUE	-0.373799	0.061721	-6.056283	0.0000
TURN	-0.938857	0.245047	-3.831339	0.0001
LNEG	-4.101005	0.439541	-9.330197	0.0000
McFadden R-squared	0.816996	Mean dependent var		0.769231
S.D. dependent var	0.421428	S.E. of regression		0.178960
Obs with Dep=0	471	Total obs		2041
Obs with Dep=1	1570			

Table 5 and 6 reports the results of value relevance models which regress earnings per share and book value per share jointly and individually. Value relevance regressions findings indicate that earnings and book value jointly and individually are more relevant under IFRS compared to local GAAP. The adjusted R² show an increase in the combined value relevance of the earnings and book value from 0.29 to 0.65.

Table 5 Value relevance of accounting amounts prepared and reported under local Turkish GAAP

Obs.471; Method: Panel EGLS	Variable	Coeff.	Std. Err.	t-Stat.	Prob	Adj.R ²
$P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVPS_{it} + \varepsilon_{it}$	EPS	0.024	0.003	76.408	0.000	0.287
	BVPS	0.005	4.890	95.338	0.000	
$P_{it} = \beta_0 + \beta_1 EPS_{it} + \varepsilon_{it}$	EPS	0.039	0.000	136.23	0.000	0.199
$P_{it} = \beta_0 + \beta_1 BVPS_{it} + \varepsilon_{it}$	BVPS	0.007	4.390	149.43	0.000	0.230

Table 6 Value relevance of accounting amounts prepared and reported under IFRS

Obs.1724; Method: Pooled EGLS	Variable	Coeff.	Std. Err	t-Stat.	Prob	Adj.R ²
$P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVPS_{it} + \varepsilon_{it}$	EPS	6.954	0.026	265.308	0.000	0.646
	BVPS	1.161	0.005	233.770	0.000	
$P_{it} = \beta_0 + \beta_1 EPS_{it} + \varepsilon_{it}$	EPS	11.538	0.019	605.147	0.000	0.574
$P_{it} = \beta_0 + \beta_1 BVPS_{it} + \varepsilon_{it}$	BVPS	2.147	0.004	580.343	0.000	0.554

Regarding individually value relevance of earnings and value relevance book value reported under IFRS, earning numbers have slightly more influence on stock prices versus book value numbers. Adj.R² for earnings is 0.57, while Adj.R² for book value earnings is 0.55. Whereas, the book value amounts have more explanatory power on price than earnings amounts under Local GAAP (Adj.R² for earnings is 0.20, while Adj.R² for book value earnings is 0.23).

Accordingly the results of value relevance regression models exhibit that both book value and earnings that reported under IFRS are more informative for investors. Specifically, earnings amounts increase its influence on stock prices than book value.

6. Conclusions and Limitations

In this study, I investigated whether the mandatory adoption of IFRS improve the accounting quality. Accounting quality has been commonly operationalized with earnings managements, timely loss recognition, and value relevance metrics in prior researches. Research findings indicate that firms applying IFRS exhibits more earnings smoothing and managing of earnings towards a target, less timely recognition of losses, but a higher association of book value and earnings with share prices. The findings show that changing accounting standards is not sufficient to improve accounting quality in Turkey. Although value relevance tests show that accounting data are more informative for investors under IFRS, it does not express the actual information content of accounting data. Inherent flexibility in principle based IFRS may open door for managers to manage earnings toward a target. The results of this study are different from the result of study conducted by Uyar (2013) expect value relevance results. Uyar (2013) observe a decrease in earnings management practices from sample used in his study. The contrasting results it may stem from sample size and firms that subjected to analyses.

Empirical results of this study support the argument that changing accounting regime solely does not improve the quality of financial reporting. Market demands for accounting information, institutional setting, legal systems and firms' incentives have much more effects in determining accounting quality (Ball et al., 2000, 2003; Ball, 2006; Leuz, 2003; Ball and Shivakumar, 2005; Burgstahler et al., 2006; Soderstrom and

Sun, 2007; Christensen et al., 2008; Holthausen, 2009). As the fact that economic and political forces have effects in shaping accounting results, Turkish regulators and standard setters should enforce more strict regulations to improve transparency environment and the quality of financial reporting in Turkey. Further, to integrate to world economic system and to reduce cost of capital Turkish legislators should construct effective legal system to protect investor rights and economic affairs.

The results of this study have some limitations. First, the firm samples that compared before and after IFRS adoption are differ from observation numbers. So this difference could affect the estimation results. Second, the all metrics that used as a proxy of accounting quality are very sensitive to economic conditions; therefore it is hard to conclude unquestioningly that difference in accounting quality stems from different accounting regimes. Third, although in regression models included some independent variables to control the effect of factors which are exogenous respect to accounting standards, it is acknowledged that there may be other incentives to manage earnings that have not been controlled for. Fourth, the variables used to estimate value relevance are directly affected from stock market. Stock market behavior subjected to not only the financial data but to many national and international dynamics. Therefore I can't definitely assert that value relevance varies because of changing financial reporting system.

References

1. Ahmed, A. S., Neel, M., & Wang, D. (2013). Does mandatory adoption of IFRS improve accounting quality? Preliminary evidence. *Contemporary Accounting Research*, 30(4), 1344–1372.
2. AICPA, (2013). http://www.ifrs.com/updates/aicpa/ifrs_faq.html, 11 may 2013.
3. Alali, F.A., & Foote, P.S. (2012). The value relevance of international financial reporting standards: Empirical evidence in an emerging market. *The International Journal of Accounting*, 47(1), 85 - 108.
4. Amir, E., Harris, T., & Venuti, E. (1993). A comparison of the value-relevance of U.S. versus non- U.S. GAAP accounting measures using form 20-f reconciliations. *Journal of Accounting Research* 31(3), 230-264.
5. Ashbaugh, H., & Pincus M. (2001). Domestic accounting standards, international accounting standards and the predictability of earnings. *Journal of Accounting Research*, 39(3), 417–434.
6. Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: Comparative loss recognition timeliness. *Journal of Accounting and Economics*, 39(1), 83–128.
7. Ball, R. (2006). International Financial Reporting Standards (IFRS): Pros and cons for investors. *Accounting and Business Research*, 36(1), 5–27.
8. Ball, R., Kothari, S. P., & Robin, A. (2000). The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics*, 29(1), 1–51.
9. Ball, R., Robin, A., & Wu, S. (2003). Incentives versus standards: Properties of accounting income in four East Asian countries. *Journal of Accounting and Economics* 36(1): 235-270.
10. Barth, M., Landsman, W., & Lang, M. (2008). International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), 467-498.
11. Bartov, E., Goldberg, S., & Kim, M. (2005). Comparative value relevance among German, U.S., and international accounting standards: A German stock market perspective. *Journal of Accounting, Auditing and Finance*, 20(2), 95-119.
12. Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings, *Journal of Accounting and Economics*, 24(1), 3–37.
13. Bliss, J.H. (1924). *Management Through Accounts*. New York, NY: The Ronald Press Co.
14. Breen, R. (1994). Foreign companies and U.S. markets in a time of economic transformation. *Fordham International Law Journal* 17, 77–96.
15. Brown, P. (2011). International financial reporting standards: what are the benefits? *Accounting and Business Research*, 41 (3), 269-285.
16. Bruggemann, U., Hitz, J., & Sellhorn, T (2013). Intended and unintended consequences of mandatory IFRS adoption. *European Accounting Review*, 22(1), 1–37.
17. Bryce, M., Jahangir Ali, M., & Mather, P.R. (2015). Accounting quality in the pre-/post-IFRS adoption and the impact on audit committee effectiveness: Evidence from Australia. *Pacific-Basin Finance Journal*, 35 (PA), 163-181.
18. Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics* 24 (1), 99–126.
19. Burgstahler, D., Hail, L., & Leuz, C. (2006). The importance of reporting incentives: Earnings management in European private and public firms. *The Accounting Review*, 81 (5), 983-1016.
20. Bushman, R., Piotroski, J., & Smith, A. (2010). Capital allocation and timely accounting recognition of economic losses. *Working paper*, Available online at http://public.kenan-flagler.unc.edu/faculty/bushmanr/Bushman_Piotroski_Smith_JBFA_Submission.pdf

21. Callao, S., & Jarne, J.I. (2010). Have IFRS affected earnings management in the European Union?, *Accounting in Europe*, 7 (2), 159-189.
22. Chen, H., Tang, Q., Jiang, Y., & Lin, Z. (2010). The role of International financial reporting standards in accounting quality: evidence from the European Union, *Journal of International Financial Management and Accounting* 21(3), 1-57.
23. Christensen, H., Lee, E., & Walker, M. (2008). Incentives or standards: What determines accounting quality changes around IFRS adoption? *Working paper*, Manchester Accounting and Finance Group and Manchester Business School available online at <https://research.mbs.ac.uk/investment-isk/Portals/0/docs/ChristensenLeeWalker2008->
24. Chua, Y., Cheong, C., & Gould, G. (2012). The impact of mandatory IFRS adoption on accounting quality: evidence from Australia', *Journal of International Accounting Research*, 11(1), 119 – 146.
25. Cuijpers, R., & Buijink, W. (2005). Voluntary adoption of non-local GAAP in the European Union: a study of determinants and consequences. *European Accounting Review*, 14 (3), 487-524.
26. Daske, H. (2006). Economic benefits of adopting IFRS or US-GAAP-Have the expected cost of equity capital really decreased? *Journal of Business Finance and Accounting*, 33 (3-4): 329-373.
27. Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of Accounting Research*, 46(5), 1085–1142.
28. Davidson, S., Stickney, C.P., & Weil, R.L. (1985). *Intermediate Accounting: Concepts, Methods and Use*, Fourth ed., Dryden Press, Forthworth.
29. Dechow, P., & Dichev, I. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77 (s-1), 35-59
30. Dechow, P. M., Richardson, S. A., & Tuna, I. (2003). Why are earnings are kinky? An examination of the earnings management explanation. *Review of Accounting Studies*, 8 (2-3), 355-384.
31. Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50 (2), 344–401.
32. DeFond, M., & Hung, M. (2004). Investor protection and corporate governance: evidence from worldwide CEO turnover. *Journal of Accounting Research* 42 (2), 269-312.
33. Deloitte Touche Tohmatsu, (2015). www.iasplus.com.
34. Eccher, E., & Healy, P. (2000). The role of international accounting standards in transitional economies: A study of The people's Republic of China. *Working Paper*, Available online at http://papers.ssrn.com/paper.taf?abstract_id=233598
35. Ewert, R., & Wagenhofer, A. (2005). Economic effects of tightening accounting standards to restrict earnings management. *The Accounting Review*, 80(4), 1101–1124.
36. Francis J., & Schipper, K. (1999) Have financial statements lost their relevance? *Journal of Accounting Research*, 37(2), 319-352.
37. Goncharov, I., & Zimmermann, J. (2006). Do accounting standards influence the level of earnings management? Evidence from Germany, *Working Paper*, Available online at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=386521
38. Goodwin, J., Ahmed, K., & Heaney, R. A. (2008). The effects of international financial reporting standards on the accounts and accounting quality of Australian firms: A retrospective study. *Journal of Contemporary Accounting and Economics*, 4(2), 89-119.
39. Hail, L., & Leuz, C. (2007). Capital market effects of mandatory IFRS reporting in the EU: Empirical evidence. *Working paper*, Available online at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1511671

40. Hail, L., Leuz, C., & Wysocki, P. (2010). Global accounting convergence and the potential adoption of IFRS by the U.S. (Part I): Conceptual underpinnings and economics analysis. *Accounting Horizons*, 24(3), 355–394.
41. Healy, P., & Wahlen, J. (1999). A review of the earnings management literature and its implications for standard settings. *Accounting Horizons*, 13(4), 365-383.
42. Holthausen, R. W. (2009). Accounting standards, financial reporting outcomes, and enforcement. *Journal of Accounting Research*, 47(2), 447-458.
43. Hung, M., & Subramanyam, R. (2007). Financial statement effects of adopting International accounting standards: The case of Germany. *Review of Accounting Studies* 12(4), 623–657.
44. IASB (2008). Exposure Draft on an improved Conceptual Framework for Financial Reporting: The Objective of Financial Reporting and Qualitative Characteristics of Decision-useful Financial Reporting Information.
45. ICAEW (2015). The effects of mandatory IFRS adoption in the EU: A review of empirical research, An update version of the study of October 2014
46. Ismail, W.A.W., Kamarudin, K.A., Zijl, T., & Dunstan, K. (2013). Earnings quality and the adoption of IFRS based Accounting Standards: Evidence from an emerging Market. *Asian Review of Accounting*, 21(1), 53-73.
47. Jeanjean, T., & Stolowy, H. (2008). Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption. *Journal of Accounting and Public Policy*, 27(6), 480-494.
48. Jermakovicz E.K., Prater-Kinsey J., & Wulf, I. (2007). The value relevance of accounting income reported by Dax-30 German companies. *Journal of International Financial Management and Accounting*, 18(3), 151-191.
49. Jones, K. L., Krishnan, G. V., & Melendrez, K. D. (2008). Do models of discretionary accruals detect actual cases of fraudulent and restated earnings? An empirical analysis. *Contemporary Accounting Research*, 25(2), 499-531.
50. Kim, J., & Shi, H. (2014). International Financial Reporting Standards, institutional infrastructures and costs of equity capital around the world. *Review of Quantitative Finance and Accounting*, 42 (3), 469–507
51. Kothari, S.P., & Zimmerman. J.L. (1995). Price and Return Models. *Journal of Accounting and Economics*, 20 (2),155-192.
52. Kothari, S.P., Leone, A.J., & Wasley, C.E. (2005). Performance matched discretionary accrual measures, *Journal of Accounting and Economics*, 39(1), 163-197.
53. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and Finance. *Journal of Political Economy*, 106(6), 1113-1155.
54. Lang, M., Raedy, J. S., & Wilson, W. (2006). Earnings management and crosslisting: Are reconciled earnings comparable to US earnings? *Journal of Accounting and Economics*, 42(1-2), 255-283.
55. Lang, M., Raedy, J. S., & Yetman, M. H. (2003). How representative are firms that are cross-listed in the United States? An analysis of accounting quality. *Journal of Accounting Research*, 41(2), 363-386.
56. Leuz C., & Wysocki P.D, (2015). The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research, *ECGI Working Paper Series in Law* file. Available online at //C:/Users/User/Downloads/SSRN-id2733831.pdf.
57. Leuz, C., & Verrecchia, R. (2000). The economic consequences of increased disclosure. *Journal of Accounting Research*, 38 (Supplement), 91-124.

58. Leuz, C. (2003). IAS versus U.S. GAAP: Information asymmetry-based evidence from Germany's New Market. *Journal of Accounting Research*, 41(3), 445–472.
59. Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, 69(3), 505-527.
60. Levitt, A. (1998). The importance of high quality accounting standards. *Accounting Horizons*, 12(2), 79–82.
61. Martínez-Ferrero, J., (2014). Consequences of financial reporting quality on corporate performance: Evidence at the international level, *Estudios de Economía* 41(1), 49-88.
62. Nichols, D. C., & Wahlen, J. M. (2004). How do earnings numbers relate to stock returns? a review of classic accounting research with updated evidence. *Accounting Horizons*, 18(4), 263-286. Available online at <http://dx.doi.org/10.2308/acch.2004.18.4.263>
63. Paananen, M. (2008). The IFRS adoption's effect on accounting quality in Sweden. *Working Paper*, University of Hertfordshire. UK.
64. Pelucio-Grecco, M.C., Santostaso-Geron, M.C., Begas-Grecco, G., & Lima, P.C. (2014). The effect of IFRS on earnings management in Brazilian non-financial public companies, *Emerging Markets Review*, 21 (C), 42-66.
65. Soderstrom, N., & Sun, K. (2007). IFRS adoption and accounting quality: A review. *European Accounting Review* 16 (4), 675-702.
66. Street, D. L., Gray, S. J., & Bryant, S. M. (1999). Acceptance and observance of International Accounting Standards: an empirical study of companies claiming to comply with IASs, *The International Journal of Accounting*, 34(1), 11–48.
67. Suadiye, G. (2012). Value relevance of book value and earnings under the local GAAP and IFRS: Evidence from Turkey. *Ege Academic Review*, 12(3), 301-310.
68. Sun, K. (2006). Financial reporting quality, capital allocation efficiency, and financial structure: an international study. *Working Paper*, University of Hawaii at Manoa.
69. Tang, Q., Chen, H., & Lin, Z. (2008). Financial reporting quality and investor protection: A global investigation. *Working Paper*, University of Western Sydney, Shanghai University of Finance and Economics, Hong Kong Baptist University.
70. UNACTAD (2005). Review of practical implementation issues of international financial reporting standards. Available online at http://unctad.org/en/Docs/c2isard28_en.pdf
71. Uyar, M. (2013). The Impact of Switching Standard on Accounting Quality, *Journal of Modern Accounting and Auditing* 9(4), 459-479.
72. Van Tendeloo, B., & Vanstraelen, A. (2005). Earnings management under German GAAP versus IFRS. *European Accounting Review* 14 (1), 155-180.
73. Watts, R L., (2003). Conservatism in Accounting - Part I: Explanations and Implications (May 16, 2003) SSRN, Simon School of Business *Working Paper*. Available online at <https://papers.ssrn.com/sol3/papers.cfm?abstract-id=414522>
74. White, G., Sondhi, A., & Fried, D., (2003). *The analysis and use of financial statements*. 3. ed., John and Wiley and Sons.
75. Young, D., & Guenther, D. (2002). Financial reporting environments and international capital mobility. *Journal of Accounting Research*, 41(3), 553-79.
76. Zeghal, D., Chtourou, S. M., & Fourati, Y. M. (2012). The Effect of Mandatory Adoption of IFRS on Earnings Quality: Evidence from the European Union. *Journal of International Accounting Research* 11(2), 1–25.
77. <http://www.iasplus.com/en/resources/ifrs-topics/use-of-ifrs>
78. <http://www.ifrs.org/use-around-the-world/documents/financial-reporting-standards-world-economy-june-2015.pdf>
79. <http://www.pwc.com/us/en/issues/ifrs-reporting/publications/ifrs-status-country.jhtml>