

MANAGEMENT & ACCOUNTING REVIEW

Volume 16 No. 1
June 2017

MANAGEMENT & ACCOUNTING REVIEW

Joint Sponsors

Accounting Research Institute & Faculty of Accountancy, Universiti Teknologi MARA Malaysia, Malaysia.

Chief Editor

Prof Dr Normah Hj. Omar

Universiti Teknologi MARA Malaysia, Malaysia

Managing Editors

Assoc. Prof Dr Roshayani Arshad

Universiti Teknologi MARA Malaysia, Malaysia

Assoc. Prof Dr Jamaliah Said

Universiti Teknologi MARA Malaysia, Malaysia

Dr Nor Balkish Zakaria

Universiti Teknologi MARA Malaysia, Malaysia

Dr Intan Salwani Mohamed

Universiti Teknologi MARA Malaysia, Malaysia

Journal Administrators

Ms Wan Mariati Wan Omar

Universiti Teknologi MARA Malaysia, Malaysia

Ms Munirah Morad

Universiti Teknologi MARA Malaysia, Malaysia

Editorial Advisory Board

Prof Dr Jimmy Tsay

National Taiwan University, Taiwan

Prof Dr Chan Jane Lin

National Taiwan University, Taiwan

Prof Dr Chris Patel

Macquarie University, AUS

Prof Dr David Crowther

De Monfort University, UK

Prof Dr Gerald J. Lobo

University of Houston, Texas, USA

Prof Dr Hiromasa Okada

Nagasaki University, Japan

Prof Dr Jeong Boon Kim

City University of Hong Kong, Hong Kong

Prof Dr Sakthi Mahenthiran

Butler University, USA

Prof Dr Yasuhiro Monden

Mejiro University, Japan

Prof Dr Foong Soon Yau

Universiti Putra Malaysia, Malaysia

Prof Dato' Dr Hasnah Haron

Universiti Malaysia Pahang, Malaysia

Prof Dr Paul Anthony Barnes

Mcquarie University, AUS

Prof Dr R. K. Mishra

Institute of Public Enterprise, India

Prof Dr Stuart Locke

University of Waikato, NZ

Prof Dr Norman Mohd Saleh

Universiti Kebangsaan Malaysia, Malaysia

Prof Dr Milind Sathye

University of Canberra, AUS

Prof Dr Grahita Chandarin

Universitas Merdeka Malang, Indonesia

Prof Dr Mazlina Mat Zain

Multimedia University, Cyberjaya, Malaysia

Prof Dr S. Susela Devi

Universiti Tun Abdul Razak, Malaysia

Prof Dr Mohammed Abdel-Haq

University of Bolton, UK

Assoc Prof Dr Samuel Chan

The Hong Kong Polytechnic University, HK

Assoc Prof Dr Jeffrey Faux

Victoria University, AUS

Assoc. Prof Dr Eko Suwardi

Universitas Gadjah Mada, Indonesia

MAR is indexed in Ebscohost, Cabell's Directory of Publishing Opportunities in Management (www.cabells.com), Ulrichs (www.ulrichweb.com) and the Journal Ranked List of Australia Research Council with ERA (Excellence in Research for Australia) and Australian Business Deans Council (ABDC). MAR is also indexed by UDLedge Social Science & Humanities Citation Index (SS&HCI) and Focus (Journals and Conference Proceedings).

© 2017 *Management & Accounting Review* is jointly published by Accounting Research Institute & Faculty of Accountancy and University Publication Centre (UiTM Press), Universiti Teknologi MARA Malaysia, 40450 Shah Alam, Selangor, Malaysia. The journal was previously known as *Malaysian Accounting Review*.

The views and opinions expressed therein are those of the individual authors, and the publication of these statements in *Management & Accounting Review* does not imply endorsement by the publisher or the editorial staff. Copyright is reserved jointly in Universiti Teknologi MARA Malaysia and the Malaysian Accounting Research and Education Foundation.

CONTENTS

- 1 Determinant of Human Capital Disclosure in the Post IFRS Regime:
An Examination of Listed Firms in Nigeria
*Mutalib Anifowose, Hafiz Majdi Ab. Rashid
and Hairul Azlan Bin Annuar*
- 31 R&D Information and Market Valuation: Empirical Evidence from
Malaysian Listed Firms
*Sunarti Halid, Amizahanum Adam, Marina Ibrahim,
Masetah Ahmad Tarmizi and Prof. Dr. Muhd Kamil Ibrahim*
- 55 Risk Management Practices in Tourism Industry – A Case Study of
Resort Management
*Nur Rahifah Amirudin, Anuar Nawawi
and Ahmad Saiful Azlin Puteh Salin*
- 75 Analysis of Unconditional Conservatism and Earnings Quality on
Financial Reporting Practices in Indonesia upon IFRS Convergence
Monica Santi, Evita Puspitasari and Erlane K Ghani
- 89 The Effect of Corporate Social Responsibility Disclosure and
Corporate Governance Mechanisms on Earnings Management and
Stock Risk: Evidence from Public Banks in Indonesia
Idrianita Anis and Ancella A. Hermawan
- 119 Effective Depreciation Model for Commercial Vehicles 119-136
in Malaysia
*Alan Lim Khiew Loon, Dr. Krishna Moorthy Manicka
and Theresa Wong Lai Har*
- 137 Zakat Fund in Malaysia: Where Does it Go To?
*Roshaiza Taha, Mohd Nazli Mohd Nor, Mohd Rodzi Embong
and Muhammad Faris Zulkifli*

- 167 Retailers' Behavioural Factors Towards Goods and Services Tax (Gst) Compliance: Sociological and Psychological Approach Study
Norhasliza Zainan, Rohaya Md Noor, Normah Omar, Roszainun Abd Aziz and Soliha Sanusi
- 189 Corporate Risk Governance and Board of Directors: Evidence from Malaysian Listed Companies
Grace Hwee-Ling, Lee and Angeline Kiew-Heong, Yap
- 213 The Relevance of Internal Governance Mechanisms to Financial Reports Timeliness
Rahimah Mohamed Yunos

Analysis of Unconditional Conservatism and Earnings Quality on Financial Reporting Practices in Indonesia upon IFRS Convergence

Monica Santi¹, Evita Puspitasari¹,
and Erlane K Ghani²

¹Fakultas Ekonomi dan Bisnis,
Universitas Padjadjaran, Indonesia

²Accounting Research Institute

ABSTRACT

This study examined the unconditional conservatism and earnings quality as part of corporate governance before and after IFRS convergence in Indonesia. Specifically, this study looked at the effect of eliminating the conservatism concept within the accounting framework, following the development of principles-based accounting standards and earnings quality on financial reporting practices. This study further examined the effect of eliminating the conservatism concept towards the earnings quality upon implementation of IFRS convergence on the financial reporting practices. Using content analysis on 180 annual reports of 36 manufacturing listed companies over a 5-year period in Indonesia, this study found that unconditional conservatism has not changed significantly after IFRS convergence. However, the earnings quality of the manufacturing companies has declined upon IFRS convergence. This study also found that unconditional conservatism has a positive influence on earnings quality upon IFRS convergence although the result is insignificant. From the agency theory's perspective, this study highlighted the introduction of accounting and governance reform on the principal-agent relationship in relation to the unconditional conservatism and earnings quality practices. The findings in this study shed some light to the regulators, practitioners and other interested parties on the implication of IFRS convergence in a developing country such as Indonesia.

Keywords: *Unconditional conservatism, Earnings quality, IFRS convergence, Financial reporting practices, Indonesia*

ARTICLE INFO

Article History:

Received: 9 February 2017

Accepted: 13 June 2017

Published: 24 November 2017

INTRODUCTION

Each country has a different accounting system which is modified and adjusted to fit the needs of the country. To increase the financial statement comparability and quality globally, the International Accounting Standards Board (IASB) developed the International Financial Reporting Standard (IFRS) with the objective to reduce the distinctive reporting regulation between countries and the cost of multinational company financial reporting and financial statement analysis and consequently, to provide high quality financial statement. The standards involve codification of accounting standards, interpretations, and frameworks in the preparation and presentation of the financial statements. IFRS provides principles-based standards rather than rules-based standards and allows companies with more flexibility in choosing the accounting policy and estimates that are best for their companies.

The IASB developed IFRS which is established based on the principles-based approach. The principles-based approach covers many aspects of financial accounting at a high level that provides guidance to preparers and auditors for situations where standards-level guidance is non-existent. The areas of interpretation can be clarified by the standard setters and provide fewer exceptions as compared to the rule-based approach. The main difference between the principlesbased approach and the rule-based approach lies in the manner in which an accounting treatment is assessed. The principles-based approach relies heavily on the facts pattern, whereas the rule-based approach relies on the literature. Following the principles-based approach in developing IFRS; the IASB has eliminated the conservatism concept which is within the accounting framework.

This study examines the effect of eliminating the conservatism concept within the accounting framework, following the development of principles-based accounting standards and earnings quality on financial reporting practices. The findings in this study shed some light to the regulators, practitioners and other interested parties on the implication of IFRS convergence on financial reporting practices in Indonesia. The next section presents the literature review, followed by Section 3 that provides the research design of this study. Section 4 presents the results and Section 5 summarises this study.

LITERATURE REVIEW

Piot et al. (2011) define conservatism as a concept that represents a prudent reaction to uncertainty in ensuring that the uncertainties and risk inherent in business situations are adequately considered. Likewise, Watts (2003) defines conservatism as increasing verification in recognising profit compared to recognising loss. Similarly, Basu (1997) defines conservatism as the tendency of the accountants to require more verification when receiving good news (i.e. profits) over bad news (i.e. losses). Arguably, within conservatism, companies could recognise the gain or profit upon sufficient verification over the transactions. That is, the gain or profit would not be recognised if it is an uncertain probability. Delaying the revenue or gain recognition based on the conservatism concept however, could cause the current earnings to be understated and in turn, overstating the next period's earnings (Houge et al., 2012; Andre et al, 2013).

The IASB (2008) noted that IFRS in substance disregards the unconditional conservatism since it can cause the understatement of assets or overstatement of liabilities. Of consequence, this leads the financial statement to become irrelevant since the information does not represent real facts. Furthermore, IFRS relies a lot on fair value measurement in the financial reporting which places relevance as a more important quality over reliability. The conservatism concept however, could decrease the relevance quality, subsequently leading IASB to eliminate the concept of conservatism. However, it does not decrease the practice of unconditional conservatism in the financial statement reporting. For example: Piot et al. (2011) found that unconditional conservatism in Europe has increased after the IFRS convergence. Other studies found that conservatism has caused the earnings quality to decrease. Meanwhile, Bellovary et al. (2005) described earnings quality as the ability of the earnings in predicting the reality of the company earnings and the ability of the earnings in predicting the future earnings.

The introduction of IFRS provides a way for the shareholders to be able to evaluate the corporate governance of their company. That is, the shareholders would be able to control the managers in the companies to behave accordingly for the benefit of their shareholders. However, studies have shown that managers often have the motivation to maximise their own profit over the company's profit (Watts and Zimmerman, 1978; Zmijewski

and Hagerman, 1981). Therefore, the managers may manipulate the information by taking advantage of the absence of conservatism imposed on the IFRS to reduce the earnings quality reported in the financial reports. Since one of the concerns of agency theory is to minimise cost spent by principal (i.e. the shareholders) in monitoring their agents (i.e. the managers) in fulfilling its contract (Xie et al., 2003), the managers are expected to perform their duty accordingly despite the absence of the conservatism principle.

Conservatism concept represents a prudent reaction to uncertainty to try to ensure that uncertainties and risk inherent in business situations are adequately considered. The concept of conservatism has two ingredients: conditional conservatism or *ex-post* (news-dependent prudence), and unconditional conservatism or *ex-ante* (news-independent prudence). The proponents of conservatism concept argue that the concept would decrease the incentive cost in doing the earnings management. However, the use of the principles-based standards may also increase the possibility of the risks such as error in management estimates and business distortions (Yurisandi and Puspitasari, 2015). In contrast, the elimination of conservatism concept may reduce the earnings quality reported in the financial reports. However, it does not decrease the practice of unconditional conservatism in the financial statement reporting.

A group of studies in the accounting research field has examined the unconditional conservatism practices. For example, Piot et al. (2011) conducted a study observing contrast conditional and unconditional conservatism around the IFRS voluntary and mandatory convergence and the role of Big 4 auditors. They found that the unconditional conservatism in Europe has increased after IFRS convergence. Andre et al. (2013) examined the impact of mandatory change to IFRS in 2005 on the level of accounting conservatism and found that the level of conservatism after IFRS convergence has not changed significantly. They concluded that decrease in conservatism is most significant in countries that have the greatest difference with the new IFRS standards. However, their study was conducted in the European context.

In Indonesia, one study has attempted to examine the effect of conservatism on accounting reports. Wardhani (2009) examines the

effect of board characteristics on conservatism in financial reporting. She found that (i) the existence of audit committee has a significant positive effect to conservatism measured by accrual, (ii) board independency has a significant positive effect to conservatism measured by book to market ratio, and (iii) managerial ownership has a significant negative effect to conservatism measured by book to market ratio. In contrast, her study failed to provide evidence on the effect of managerial ownership on conservatism. She presumes that the insignificant findings could be influenced by the subjective interpretation in implementing the accounting standards. The decision to become more conservative or aggressive made by a company is highly dependent upon the company's characteristics and policy. However, Wardhani's (2009) study focused on the effect of conservatism on financial reporting. There has yet to be a study that examines unconditional conservatism and its effect to earning quality in the context of a developing country such as Indonesia. Hence, this study aims to examine this issue.

RESEARCH DESIGN

Sample

This study chose the manufacturing companies listed in the Indonesia Stock Exchange (IDX) as the sample. The manufacturing companies were selected since this industry is considered as the prime contributor to the Indonesian economy. Specifically, the manufacturing companies were worth IDR 2,097.7 trillion (approx. USD \$156 billion) in 2015, contributing 18.1 percent to the country's gross domestic product (GDP). This study used the annual reports of 36 companies over a 5-year period between 2011 to 2015, making the final number of sample in this study as 180.

Data Collection

This study used content analysis in examining the effect of unconditional conservatism and earning quality on the financial reports of the manufacturing companies. Content analysis was performed by reviewing the annual reports of the companies over a 5-year period. Specifically, the data extracted from the annual reports were inclusive of net earnings, operating cash flow, share prices, earnings per share and total assets. The data extracted were then keyed in to the SPSS for analysis.

Variable Measurement

To achieve the objective of this study, this study relied on the earnings/accrual measurement as the proxy for the unconditional conservatism (Ahmed and Duellman, 2012). The following formula was developed to measure unconditional conservatism:

$$\text{Unconit} = \text{Nit} - \text{CFit} \quad (1)$$

UnCon_{it} = unconditional conservatism

Nit = Net Earnings for company i for period t

CF_{it} = Operating cash flow for company i for period t

If the result is negative (i.e. less than 0) the earnings is more conservative. On the contrary, if the result is positive (i.e. more than 0) the earnings is less conservative.

To measure earnings quality, this study used the Earnings Response Coefficient (ERC) as the proxy. According to Scott (2006), the higher the ERC, the better the earnings quality since the higher ERC represents the earnings persistence in the future. It means that the earnings are stable over time and represent lower risk (Zhemin and Thomas, 1994). ERC is the coefficient from the regression analysis with the Cumulative Abnormal Return (CAR) as the proxy for the share price reflecting the market response over the public accounting information, and the Unexpected Return (UE). Below is the formula:

$$(t_1, t_2) = \Sigma \text{AR}_{it} \quad (2)$$

$$\text{AR}_{it} = R_{it} - R_{mt} \quad (3)$$

$\text{CAR}_{it}(t_1, t_2)$ = Cumulative Abnormal Return for company i for the window periods ± 5 days from the financial statement publication date

(with $t=0$ is the financial statement publication date)

AR_{it} = abnormal return for company i and day t
 R_{it} = actual return for company i and day t
 R_{mt} = market return on day t

Actual return is calculated using the formula below:

$$\frac{R_{it} = P_{it} - P_{it-1}}{P_{it-1}} \quad (4)$$

P_{it} = closing price of the share of company i on day t
 P_{it-1} = closing price of the share of company i on day $t-1$

Meanwhile, the market return is calculated using the formula below:

$$R_{mt} = \frac{IHSGr_t - IHSGr_{t-1}}{IHSGr_{t-1}} \quad (5)$$

$IHSGr_t$ = IHSG on day t

$IHSGr_{t-1}$ = IHSG on day $t-1$

Unexpected earnings are calculated using the formula below:

$$UE_{it} = \frac{E_{it} - E_{it-1}}{E_{it-1}} \quad (6)$$

UE_{it} = *Unexpected* EPS for company i on period t

E_{it} = EPS for company i on period t

E_{it-1} = EPS for company i on period $t-1$

The T-Test is used to investigate the unconditional conservatism and earnings quality before and after the IFRS convergence. Subsequently, the regression analysis is used to examine the association between earnings quality and unconditional conservatism, using company size as control variable.

$$\text{ERC}_{i,t} = \beta_0 + \text{UnCon}_{i,t} + \text{Size}_{i,t} + \varepsilon \quad (7)$$

ERC = Earnings Response Coefficient (earnings quality)
 UnCon = Unconditional Conservatism
 Size = Company Size (Logaritma Natural Total Assets)

There are two regression analyses with the model. The first one represents companies before the IFRS convergence over a period of 2009 to 2010. The second one represents companies after the IFRS convergence over a period of 2011 to 2013.

RESULTS

Unconditional Conservatism – Before and After IFRS Convergence

Table 1 presents the results for the unconditional conservatism before and after the IFRS convergence. The results show that the mean score for unconditional conservatism before the IFRS convergence is -152061.06, whilst the mean score for the unconditional conservatism after the IFRS convergence is -172044.54. The T-Test was performed to determine whether there was a significant difference between the unconditional conservatism before IFRS convergence and the unconditional conservatism after IFRS convergence. The results show no significant difference ($p=0.852$).

Table 1: Unconditional Conservatism

Statistics	Before IFRS Convergence	After IFRS Convergence
Sample	72	108
Mean	-152061.06	-172044.54
Z		-0.187
Z table (5%)		± 1.96
Sig (2 tailed)		0.852

The results in Table 1 show that the unconditional conservatism before the IFRS convergence is less than the unconditional conservatism after the IFRS convergence. The results indicate that the sample companies become more conservative after the IFRS convergence. This study implies that the unconditional conservatism has increased after the IFRS convergence. The

results in this study are consistent with the findings shown in Piot et al. (2011) that provided evidence that unconditional conservatism has increased after IFRS convergence. Hellman (2007) states that whenever there is an uncertainty, the conservatism principle is still justifiable. However, the difference of the uncertainty conservatism between before IFRS convergence and the unconditional conservatism after IFRS convergence is not statistically significant. Such finding is consistent with Wardhani (2009) that presumed that the insignificant findings could be influenced by the subjective interpretation in implementing the accounting standards. The decision to become more conservative or aggressive depends highly on the company's characteristics and policy itself.

Earnings Quality – Before and After IFRS Convergence

Table 2 presents the results comparing the earnings quality before the IFRS convergence and the earnings quality after the IFRS convergence. The results show that the mean score for earnings quality before IFRS convergence is 0.28289 whilst the mean score for the earnings quality after IFRS convergence is -0.52418, resulting in a mean difference of 0.80707. The results of the T-Test show that there is a significant difference between the earnings quality before the IFRS convergence and the earnings quality after IFRS convergence ($p=0.035$).

Table 2: Earnings Quality

Statistics	Before IFRS Convergence	After IFRS Convergence
Sample	72	108
Mean	0.28289	-0.52418
Z		-2.110
Z table (5%)		± 1.96
Sig (2 tailed)		0.035

The results in Table 2 show that the earnings quality has decreased significantly after IFRS convergence. The results support that the ERC level after the IFRS convergence is lower. It means that the earnings quality is decreasing. The result supports the research findings in Houge et al. (2012) and Andre et al. (2013) showing that IFRS convergence does not

elevate the earnings quality due to judgment and flexibility. Karampinis and Hevas (2011) stated that several countries including Indonesia are governed by code law that has special characteristics such as weak law enforcement, concentrated ownership, and high usage of bank funding. These characteristics have caused the public disclosure to become less important compared to the common law countries.

Effect of Unconditional Conservatism on Earnings Quality Before and After IFRS Convergence

Table 3 presents the results for the unconditional conservatism, controlling for size, and its effect on earnings quality before and after the IFRS convergence. The results show that the influence of the unconventional conservatism, controlling size on the earnings quality before IFRS convergence at $R=0.245$ is weak. The R Square of 6% indicates that only 6% of the model contribute to the earnings quality. The results show that after the IFRS convergence, the R increased to 0.285, which is an indication that the influence of the unconventional conservatism and controlling size on earnings quality has improved. This is further supported by the R Square showing that 8.1% of the model contributes to the earnings quality. The adjusted R also shows an increase from 1.8% to 5.5% on the effect of the unconditional conservatism and earnings quality before and after IFRS convergence. However, the results show no significant difference on the effect of unconditional conservatism and earnings quality before and after IFRS convergence.

Table 3: Unconditional Conservatism and Earnings Quality

	Before Convergence		After Convergence	
R	0.245		0.285	
R Square	0.06		0.081	
Adjusted R	0.018		0.055	
Constanta	0.270	P value =0.086	0.309	P value =0.140
Unconditional Conservatism	1.120×10^{-8}	P value =0.415	4.738×10^{-9}	P value =0.707
Size	-0.16	P value =0.132	-0.20	P value =0.108

CONCLUSION

This study examined the unconditional conservatism and earnings quality before and after the IFRS convergence. This study also looked at whether the absence of conservatism influences earnings quality was shown in the annual reports. Using the annual reports of 36 manufacturing companies over a 5-year period, the results show that there is no significant difference between the unconditional conservatism before IFRS convergence and the unconditional conservatism after IFRS convergence. However, this study found that the earnings quality before IFRS convergence is significantly different than the earnings quality after IFRS convergence.

This study is not without limitations. First, the sample used in this study was obtained from 36 manufacturing companies in Indonesia. Although 180 annual reports from the 36 companies were obtained over a period of 5 years, an increase in the sample size and period may provide more robust evidence in examining the effect of unconditional conservatism on earnings quality. Secondly, this study only used size as the only control variable to examine the effect of unconditional conservatism on earnings quality. There is a possibility that the results shown in this study may be different if more control variables were included in this study.

In summary, the effect of unconditional conservatism on financial reporting is still inconclusive which could be attributed by the proxies used to measure unconditional conservatism. This study contributes to the literature by providing evidence on the effect of unconditional evidences to financial reporting which can serve as an indicator of good corporate governance in Indonesia. This study also sheds some light to the regulators, practitioners and other interested parties on the implication of IFRS convergence in a developing country such as Indonesia.

REFERENCES

- Ahmed, A.S. and Duellman, S. (2007). Accounting conservatism and board of director characteristics: An empirical analysis. *Journal of Accounting and Economic*, 43 (2-3), 411-437

- Andre, P., Filip, A and Paugman. L (2013). Impact of mandatory IFRS on conditional conservatism in Europe. <https://hal-essec.archives-ouvertes.fr/hal-00862683>
- Basu, S. (1997). The conservatism principle and asymmetric timeliness of earnings. 24(1), 3-37
- Bellovary, J.L., Giacomino, D.E. and Akers, M. D. (2005). Earnings quality: It's time to measure and report. *The CPA Journal*, 75(11), 32
- Houqe, M.N., Van Zijl, T., Dunstan, K. and Karim. W (2012). The effect of IFRS convergence and investor protection on earnings quality around the world, *The International Journal of Accounting*, 47(3), 333-355
- IASB (2008), 'Exposure draft: An improved conceptual framework for financial reporting: Chapters 1 and 2', IFRS Foundation, London.
- Karampinis, N. and Hevas, D. (2011). Mandating IFRS in an unfavorable environment: The Greek Experience. *The International Journal of Accounting*, 46(3), 304-332
- Piot, C., Dumontier, R and Janin, R. (2011). IFRS consequences on accounting conservatism within Europe: The Role of Big 4 Auditors. Working Paper, Universite De Grenoble
- Wardhani, R. (2008). Tingkat konservatisme akuntansi di Indonesia dan hubungannya dengan karakteristik dewan sebagai salah satu mekanisme corporate governance. Hibah Penelitian Fakultas Ekonomi Universitas Indonesia.
- Watts, R. L., and Zimmerman, J. (1978). Towards a positive theory of the determination of accounting standards. *Accounting Review*, 56 (January): 112-134.
- Xie, B., Davidson, W.N., and DaDalt, P.J. (2003). Earnings management and corporate governance: The role of the board and the audit committee, *Journal of Corporate Finance*, 9: 295-316.

- Yurisandi, T and Puspitasari, E (2015). Financial reporting quality – before and after IFRS Convergence using NiCE qualitative characteristics measurement. *Procedia-Social and Behavioral Sciences*. 211, 644-652
- Zmijewski, M.E., and Hagerman, R.L. (1981). An income strategy approach to the positive theory of accounting standard setting/choice. *Journal of Accounting and Economics*, 3(2): 129-49
- Zhemin, W and Thomas, H. (1994). Income smoothing and incentives: Empirical test using accounting changes. *Accounting Review*, January, 112-137.

