Economic Policy Uncertainty and Manager's Choices to Switch-off Between Earnings Management Strategies: Evidence from Indonesia Capital Market

Yeni Januarsi
{yeni_januarsi@untirta.ac.id}

Accounting Department, University of Sultan Ageng Tirtayasa

Abstract. This study investigates whether the uncertainty environment influences manager to choose between earnings management strategy in Indonesia, Southeast Asia's largest economy. The current study uses ordinary least squares clustered by firm and year and incorporating 200 firm-year observations from all industries except finance and banking from 2012 to 2020. Current study discovered that economic uncertainty causes managers to shift from accrual earnings management (AEM) to real earnings management (REM). This result robust for several alternative measurements of earnings management and economic uncertainty. Furthered investigation finds that the effect of EPU on earnings management switch-off is more evidenced in high leverage firms and income increasing firms. Current study implies that uncertainty environment become manager's drivers to engage in REM more likely than AEM and create a costly environment in order to produce reliable financial statements.

Key words: Economic Uncertainty, Covid19 Pandemic, Accrual Earnings Management (AEM) to Real Earnings Management (REM).

1. Introduction

Recent years have been witnessed a decline in global economic growth, such as 2008 crisis and pandemic COVID19, which has been attributed to an increase in economic policy uncertainty (EPU). As an emerging body of empirical research, high EPU has severe negative repercussions for businesses. For instance, [1] discover that EPU causes a significant increase in the firm financial constraints. Level policy uncertainty shocks can have a negative impact on a company's ability to operate financially by reducing available capital, raising the cost of financial capital, and lowering the value of the company. [2], [3], and [4] discover that EPU is a priced risk factor because investors do not know how the uncertainty potentially affect business performance as it raises the volatility of returns. Furthermore, EPU can also reduce business investment [5; 6], which may have a severe effect on future performance. Although cross-country correlations between EPU and economic activity extensively are also considered in the literature, the influence of such uncertainty on manager behavior and decision at the firm level cannot be overlooked [7, 8] as EPU has consequences on manager's behavior, thus influencing the quality of financial reporting [9 -15].

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Prior empirical studies on the association between EPU and financial reporting quality recorded a mix of findings and inconsistent results. On one hand, EPU decrease the quality of financial reporting, promoting the positive association. For example, [12] suggests that EPU increases uncertainty regarding the timing of future cash flows and creates incentives for EM as it increases information asymmetry and creates firm's earnings and cash flow variability. [15] also evidenced similar findings that EPU induces manager to engage in accrual earnings management (AEM). Furthermore, EPU can lowered the comparability of financial statement between peer's firm [14] because EPU increases the variation in accounting estimations and investors are uncertain about the information provided by earnings. This means that when EPU is high, investors are unsure about the information provided by earnings and, as a result, decreasing the financial statement comparability. On the other hand, another group of research find that EPU can enhance the quality of financial statement, supporting the negative association. For instance, EPU lessen manager's incitive to engage EM because in uncertainty environment, stakeholders demand for high level of disclosure and transparency, reducing opportunities for engaging EM and may enhance the quality of financial reporting. In addition, greater scrutiny from investors, the media, and authorities in high uncertainty period can help to curb such behavior. [16] supports this line of reasoning and find empirically negative association between EPU and AEM. In general, these studies provide inconsistent evidence in the literature on the effect of EPU on manager behavior and decisions which can affect the quality of financial reporting. Therefore, more research needs to examine the effect of EPU on the quality of financial reporting, especially EM strategy. Current study attempts to fill this void.

In accordance with the EM literature, companies can achieve the reported earnings target through AEM and/or real earnings management (REM) [17 – 23]. Accrual-based earnings management occurs (AEM) when managers select accounting policies from a set of generally accepted policies in order to meet earnings targets [24]. Managers can use AEM to achieve desired reported earnings numbers by controlling discretionary accruals such as determining the economic life of fixed assets or deferring asset or inventory write-downs. Using REM, on the other hand, company deviate from standard business practices by altering the timing or structuring of business transactions in order to meet or exceed earnings targets [17]. A company modifies its actual operations to increase its current reported earnings target by using abnormal sales discounts, reducing discretionary spending (research and development, employee training), or having overproduction to reduce its reported cost of goods sold [17]. Unlike AEM, REM has direct cash flow consequences as well as potential economic consequences for a firm's long-term value [20, 25]. As a result, real earnings management strategies are thought to be more expensive [26]. I addition, REM is more difficult to detect by auditor than AEM strategies [19, 20, 27, 24].

Aiming to provide new evidence in emerging market, especially from Indonesia capital market, from financial accounting perspectives, current study extends prior work by investigating the link between EPU and the possibility that managers switch-off from one EM strategy to another EM strategy. For more specific, current study examine whether higher level of EPU induces manager to use two EM strategies, AEM and REM, as a complementary or as a substitute. As a complementary, manager rely on both AEM and REM to achieve the earnings target (complementary hypothesis). In contrary, manager can switch-off from AEM to REM as it is more difficult for outsiders to detect REM (substitute hypothesis).

Current study addresses following question: **does higher level of EPU induce manager to switch-off between AEM and/or REM?** Prior studies on the EM switch-off documented limited and mix findings. There has only been a small amount of research carried out, and the results have been inconsistent. [28] conducted research using US companies and found that managers use REM rather than AEM when there is a high degree of comparability in the accounting information. The reason for this is that when companies' accounting information is highly comparable to one another, stakeholders are able to evaluate and monitor managers more effectively, which makes it more expensive for managers to use accruals to achieve performance targets. Instead, managers are turning to REM because it is harder for outsiders to detect (substitute hypothesis). More current research, [29] support similar findings using emerging market data from ASEAN Countries. They found that ASEAN countries experience EM switch-off when higher level of accounting comparability exist among peer firms and documented substitute hypothesis is supported in ASEAN context. In the case of Taiwanese companies, [30] found that AEM and REM practice will increase when the requirement for reporting was lowered. This finding lends support to the complement hypothesis. The reason for this is because of the lower reporting and litigation cost environment in Taiwan. [31] conducted research on companies based in 19 "frontier countries," defines as markets which are too small and less accessible to be considered an emerging economy. They discovered that accounting comparability had no impact on REM although it reduces AEM. In addition, the effect on AEM in only visible in common law countries but not in civil law nations. In general, two competing hypotheses, the substitute hypothesis and the complementary hypothesis, explain the contradictory results seen in the EM literature on how manager behavior on EM strategy.

Whether it is the substitute hypothesis, or the complementary hypothesis supports in EM switch-off literature, prior studies documented that manager could switch-off the EM choices because the implementation of the international reporting standards (IFRS), accounting comparability, leverage, equity compensation and market pricing [22, 23, 26, 28, 29 32, 33]. However, how uncertainty environment may affect the switch-off effect from EM choices is not clear in the literature. EPU is one of the factors that may influence the likelihood of manager to switch-off between the two strategies and cannot be overlooked. It is because, as discussed in [12], the increased uncertainty to estimate the accrual cause difficulties to detect EM and incentives to engage EM will increase. Increased EPU also may create high information asymmetry and more volatile firms' earnings and cash flow, giving opportunity for manager to engage more EM. Among two EM strategies, REM is the most difficult earnings manipulation strategy to detect by outsiders such as auditors and regulator. Therefore, when EPU is high, managers are more likely to switch from AEM to REM as they may find it is safer to achieve the earnings target by using REM with less scrutiny from the auditor and regulator. Thus, giving support to substitute views. However, contrary argument may also occur by supporting the complement views. It is because in high uncertainty environment, there will be a greater incentive to manipulate earnings because managers will be more likely to disclose a better financial figure of the company. Firms need to present good image of accounting number in the financial statement to gain more trust from capital market in uncertain condition. In this case, firm can use both AEM and REM to achieve the desired earnings number to be presented in financial statement, supporting for complementary hypothesis. [34] support this claim by showing positive association between EPU and AEM.

This study attempts to provide additional evidence from an emerging market perspective, using Indonesia capital market data, which offer unique setting to investigate the association between EPU and EM strategy. The aggregate EM score for Indonesia's capital market is 18.3, which is higher than both Malaysia and the Philippines and indicates a high level of earnings management [35]. The investor protection strength in Indonesia only scored 5.7 and 5.3 out of 10 in 2017 and 2016, respectively, indicating that Indonesia has weak investor protection. A country with weak investor protection will be more likely to engage in EM due to the greater benefits of private control. Inadequate corporate governance and family control are additional characteristics of Indonesia's capital market that encourage firms to engage in EM. In addition, the COVID-19 pandemic has had significant impacts in recent years in Indonesia. It has ever been recorded as a country with the highest COVID-19 case in ASEAN, which causes high economic uncertainty and may induce managers to engage more EM, as previous studies have suggested [36, 15]. To shed new light on these topics from the perspective of an emerging economy, this study used data from Indonesia to analyze current research gap.

This study makes several contributions to the literature on EPU and EM. **First**, we add to the EM literature that EPU become essential factor considered by manager to switch between EM strategy. We found that managers have ability to switch from AEM to REM in order to achieve the earnings target when the level of uncertainty is high. **Second**, this study provides additional evidence from emerging market country with respect to two conflicting hypotheses regarding the effect of EPU on EM strategy. While some group of research support complement views [37, 30], this study supports the substitute views in the context of emerging market, which in line with [38, 29, 28, 21]. **Third**, while most of prior studies in EM switch-off literature documented findings from developed market, I complement prior studies by documenting that EPU considered as essential factor for emerging market to influence manager behavior and decision regarding the presentation of accounting number in financial statement. As we find that EPU induces manager to more likely engage REM but disincentive them to engage AEM, this study addresses the important on how regulator in emerging market should issue some kind of policy or regulation which may reduce the propensity of manager engaging REM when EPU is high. **Fourth**, this study will be the first study to investigate the trade-off between EM strategy because of the EPU in emerging market. Current finding can be use as essential reference for future research to extend current topics using broader sample.

2. Literature Review and Hypothesis Development

2.1. Economic Uncertainty

While there is no universally accepted definition of "economic policy uncertainty," the term generally refers to the possibility that unexpected shifts in the economy will prompt authorities to shift their policies [36]. In addition, EPU can also reflects the likelihood that economic policy will change during the subsequent period thereby impacting macroeconomic and microeconomic activity [39]. As a result of the unpredictability of fiscal, political, regulatory, and monetary policies, it reflects the fluctuations and flow of the economy. The increased uncertainty associated with economic and financial choices under higher EPU could cause postponed for several decisions. It is also obvious that the uncertainty of COVID-19 is causing several companies and

countries to delay making economic decisions. [40] suggests that for a company to have certainty, it must be able to predict its future outcomes with absolute confidence. He explained that uncertainty exists when it is hard to predict the likelihood of every future event. A business may be able to predict what might happen in the future, but it will be unable to assess the likelihood of each possibility.

It is also important to differentiate between risk and uncertainty, as [41] pointed out. In contrast to uncertainty, risk is defined as a known probability while uncertainty define as unknowable probability. Knight (2012) imply that we can quantify risk by calculating the odds of each possible outcome, but we can't quantify uncertainty because we don't have enough information to make an informed guess about its likelihood. The term "risk" or "adventure" is used to describe a situation in which a company has the ability to foresee three distinct outcomes for the future value of a currency: an increase, a decrease, or a stable value, and assign a probability to each. Uncertainty or ambiguity exists when assigning probabilities to possible outcomes is not possible.

2.2. Earnings Management (EM)

EM is defined as "any action taken to influence the external financial reporting process for private gain as opposed to facilitating the process's neutral operation," [42]. Earnings manipulation occurs when managers use their opinion in reported earnings statement and transaction structuring to alter financial statement in order to either mislead stakeholders about the company's underlying business or influence contractual outcomes that rely on reported accounting numbers [43]. AEM or REM are the most common forms of EM. AEM occurs when managers use GAAP accounting discretions to manipulate accruals through accounting and estimation methods [44]. For example, to change reported depreciation expenses and earnings, a manager may revise asset useful life estimates or switch from a straight-line method to a double-declining balance method. Accrual manipulation has no direct impact on cash flow. REM, on the other hand, alters the timing and structure of business transactions in order to change earnings [45], which may deviate from the optimal plan of action [17, 18]. For example, managers can offer high sales discounts or use more lenient credit terms to increase the firm's sales in the current year at the expense of lower cash flow per sales. As a result, REM can have a direct impact on cash flows [17]. In general, real manipulation activities may be more difficult for external stakeholders or auditors to detect than AEM.

According to EM literature, internal or external monitoring such as Board-related characteristics (an independent audit committee or board of directors) and market competition can curb AEM [46 - 49]. Legal and regulatory environments are also determinant that may curb EM. In addition, implementation of IFRS can also mitigate menager engaging EM [22, 50]. [50] suggest that the effect of board independence on accrual manipulation is stronger after the adoption of IFRS. However, how monitoring devices response toREM is less clear. On the one hand, managerial ownership, internal governance, an audit committee, and audit quality can help to mitigate REM [46-48]. REM, on the other hand, REM increase the correlation with a country's law enforcement and legal regulation [51, 52] .

2.3. Hypothesis Development

The current study extends prior work by investigating the link between EPU and the possibility that managers switch-off from one EM strategy to another EM strategy from the perspective of financial accounting, using emerging markets data from Indinesia capital market. In EPU literature, we document that EPU cause unfavorable impact on the quality of financial reporting. For instance, [14] evidenced that EPU reduce the quality of earnings and its comparability and [12] found that uncertain economic policy cause distortion in financial information as it makes more investors and creditors facing difficulties to assess the existence and impact of hidden "adverse news,". With respect to EM strategy, existing literature investigating EPU, and manager's choices of EM strategy are limited and evidenced inconsistent findings. Moreover, there are scarce empirical work examine the possibility that EPU cause the switch-off effect of EM strategy.

From the EPU literature perspective, EPU cause changes in economic policy during the uncertainty period [39], which can affect the business activity and managers' behavior and decision in firm level. For example, during the highest case of COVID19 in Indonesia, government issue policy known as "large-scale social restriction (PSBB)" and then the government change the policy with another policy known as "community activities restriction enforcement (PPKM)". The implementation of these regulations during high uncertainty period cause severe impact on many business activities. Stakeholders and investor may require firms to boost its disclosure and transparency in order to reduce stakeholder anxiety, thus reducing the information asymmetry. In addition, even if outsiders still need more information's during the high uncertainty, they can obtain such information from financial analyst and the media. Finally, failing to disclose detail information regarding firm operations and investment decision may negativity effect the investor respond to the company. These conditions provide disincentive for manager to engage in AEM. Manager will be less likely to rely on AEM in high EPU period as it is too costly and risky for them to choose AEM to achieve earnings target because AEM is subject to auditor and regulator attention, moreover with high level of transparency and disclosure during EPU. Similarly, [53]) suggest that managers respond to rising EPU by reducing earnings opacity in order to balance the information asymmetry caused by EPU. Managers improve their voluntary disclosure offering in response to higher EPU. Thus, taking this possible condition, I predict that EPU will be negatively associated with AEM. I propose the following hypothesis:

H1a: Higher *EPU decrease the propensity of manager engaging AEM*

When a manager's ability to engage in AEM is limited due to higher EPU, how the manager responds to REM can be explained in a variety of ways. First, assuming that hypothesis logic is right, corporations will look for another way to show desired earnings number in financial statements. Because there is a possibility that management forecast discloses less frequently and only for a short time horizon in times of high macroeconomic uncertainty [54], managers may take advantage of this opportunity to engage in more EM strategy with less scrutiny from outsiders such as auditors and regulators. Switching to REM will become a good option for managers in order to attain the desired earnings. Second, increased economic uncertainty will increases information asymmetry due to differing views on the impact of EPU [53]. Even though, in times

of high economic uncertainty, more voluntary disclosure is published to the capital market to reduce information asymmetry, as suggested by [55, 56], the quality of disclosure may suffer as managers use REM to "mask" the disclosed information. According to positive accounting theory (PAT), during an economic crisis, managers may employ a technique known as *"big bath accounting*" to under-report earnings in order to meet earnings targets more easily in the following period [57]. It means that when an uncertain era causes a slump in macroeconomics, public information published to the capital market may not always accurately reflect the firm's true performance, lowering the faithful representation of financial information. For example, EPU severely impacted many businesses' activities due to limits in business activities, resulting in a substantial fall in sales revenue. Instead of using accrual manipulation, which attracts more attention from auditors, firms can give a large discount in the current period to enhance earnings target and the abnormal cash flow will occur in current period. As a result, managers can achieve the earnings figure presented in the financial statement.

In general, under higher economic uncertainty conditions, managers will be more likely to switch to REM to accomplish the reported earnings target due to heightened information asymmetry and the difficulty of auditors and regulators detecting such behavior. As a result, I predict that higher EPU will be positively related with REM. I propose the following hypothesis:

H1: Higher *EPU increase the propensity of manager engaging REM*

3. Research Design

3.1. Sample Selection

We start the sample selection process by including all publicly listed firms on the Indonesia stock exchange (IDX) by excluding the financial and banking industry due to different characteristics and regulations influencing the EM measurement. During 2012-2020, initially, we documented 4,320 firm-years observations represented by 480 firms. We required at least eight firms for each 4-digit GSIC code to be included as our sample and to calculate the abnormal level of AEM and REM. Further, we delete firm years with insufficient data to calculate all variables we need in the regression model—finally, the above criteria selection yield in 1800 firm-years observation from 200 listed companies in IDX.

3.2. Variable Measurement

3.2.1. EPU Measurement

This study measure EPU by adopting the world uncertainty index (WUI) developed by by Hites Ahir (International Monetary Fund), Nicholas Bloom (Stanford University) and Davide Furceri (International Monetary Fund). They use frequency counts of "uncertainty" (and its variants) in quarterly Economist Intelligence Unit (EIU) country reports to calculate quarterly economic uncertainty indices for 143 countries from 1996 onward. EIU reports analyze and forecast political, policy, and economic developments in each country. Country-specific analysts

and an EIU editorial team create them. Scaling raw counts by report word count makes the WUI comparable across countries.
The WUI spikes globally during 9/11, SARS, Gulf War II, the Euro debt crisis, El Niño, Europe's border-control crisis, Brexit, and the 2016 US presidential election. Cross-country comparisons show that uncertainty varies by country and is lower in advanced economies than elsewhere. The index is linked to economic policy uncertainty (EPU), stock market volatility, risk, and lower GDP growth.

For the baseline model, I use the median value of WUI. In addition, the average value of WUI also included as EPU measurement for robustness test. I also adopt the period during the COVID-19 and pre-COVID-19 pandemic to measure uncertainty environment by applying dummy variable which indicate 1 for period during the COVID-19 from 2019 up to present and zero otherwise. I use the pandemic COVID-19 to measure economic policy uncertainty because during the pandemic period, economic policies have become increasingly uncertain. Indonesia applied uncertainty economic policy which change over the period during the pandemic COVID - 19, effecting the economic and business activity in Indonesia. [36, 58] also suggest that business activities became more uncertain as a result of the COVID-19 pandemic for a number of reasons, including the uncertainty of the pandemic's period would last, what effects it would have on society, and how another pandemic might affect the global economy. Therefore, COVID-19 period can be use as reflection regarding the economic uncertainty.

3.2.2. Accruals Earnings Management

In order to measure the level of AEM, I use abnormal accrual (equivalent with discretionary accrual – DAC), which will be measured by following Dechow-Dichev (DD) model [59] because the DD model can predicts accruals better than the modified Jones model [60]). This study uses this following regression equation as a metric of AEM as adopted by [61, 62]:

$$TACC_{it} = \beta_0 + \beta_{1i}\, CFO_{i,t-1} + \beta_{2,i}\, CFO_{i,t} + \beta_{3,i}\, CFO_{i,t+1} + \beta_4\, \Delta REV_{i,t} + \beta_5\, PPE_{i,t} + \varepsilon_{i,t} \quad \text{Eq. (1)}$$

Where $TACC_{it}$ is Total accrual compute as follows:

$$TACC_{it} = \Delta CA_{it} - \Delta CL_{i,t} - \Delta\, Cach_{i,t} + \Delta STDEBT_{i,t} \quad \text{Eq. (2)}$$

Where ΔCA_{it} is change in current assets between year t-1 and year t, ΔCL_{it} is change in current liability between year t-1 and year t, $\Delta Cach_{it}$ is change in cash between year t-1 and year t, $\Delta STDEBT_{it}$ is change in debt in current liability between year t-1 and year t, $CFO_{i,t-1}$ is cash flow from operation, $\Delta REV_{i,t}$ is change in revenue between year t-1 and year t, $PPE_{i,t}$ is gross value of Plant, property, and equipment. I use the residual value from equation (1) as AEM proxy and take the absolte value of the residual because the pattern of EM can be income increasing or income decreasing.

3.3.3. Real Earnings Management

To estimate a firm's REM activity, we used the model developed by [17] which has been widely adopted in the literature [22, 30, 52]. REM activity entails abnormal cash flows and abnormal discretionary expenses, such as R&D, advertising expenses, and selling, general, and administrative (SG&A) expenses. Following [17], we measured REM using abnormal cash flows or abnormal discretionary expenses. I take the residual value of abnormal cash flows or abnormal discretionary expenses and multiplied the residual by negative 1 to ensure that a higher value indicates greater AEM activity [18, 21]. Similarly, negative residual of abnormal discretionary expense used as the measure of abnormal discretionary expense, with a higher value indicating greater REM activity. In addition, we calculated a comprehensive measurement of REM by summing up the two estimates of abnormal cash flow and abnormal discretionary expenses [21, 28, 63]. We used absolute values because managers may engage in REM by using both income increasing and income decreasing EM.

1.1. Model Specification

To examine the association between EPU and the propensity of manager's choices switch-off between EM strategy, I use following baseline model:

$$REM_{it} = \alpha_0 + \alpha_1 EPU_{it} + CV_{it} + \varepsilon_{it} \quad (3)$$

$$AEM_{it} = \alpha_0 + \alpha_1 EPU_{it} + CV_{it} + UnexpectedREM_{it} + \varepsilon_{it} \quad (4)$$

The variable of Interest is EPU with coefficient α_1 in each equation. I predict that coefficient α_1 in equation (3) will be positive while coefficient α_1 in equation (4) will be negative. I include the *UnexpectedREM* in equation (4) following [21, 29, 32] to capture the residual that do not include in error term. This is important considering that manager use AEM at the end of the fiscal year, it may be influenced by REM-related factors not accounted for by the explanatory variables during the period. I also include year fixes effect to account for time-specific heterogeneity.in the regressions. I use pooled ordinary least square clustered by firm and year following [64].

The equation (3) and (4) also include several firms specific factors and country determinants control variables (CV). I include firms' specifics characteristics as they might influence EM behavior. They include market to book ratio (MTB), growth measured by sales growth (GROWTH), leverage (LEVERAGE), size as measured bt Ln of total assets (SIZE), cash flow from operation (CFO) scale by total assets, and Return On Assets (ROA) . GDP and IFRS period included as country factors that might have impact on EM strategy.

4. Result

4.1. Descriptive Statistics

Table 1 shows descriptive statistics using various firms characteristics with continuous variable and also country factors. As indicated in table 1, the mean and median absolute value of AEM (AbsAEM1) are 0.7232 and 0.2793, respectively, with standard deviations of 1.2677, showing that AEM among sample used in this study is varies considerably. The large standard deviations of AEM giving support to [35] who point out that the EM level in Indonesia considered high. One of the possible explanations is because Indonesia as emerging market still suffer from low litigation, lack of investor protection, and poor corporate governance causing higher degree of EM practice. The mean value of REM1 is 1,6584, with standard deviations of 3.2698, implying that level of REM is varies considerably. The mean of EPU (WUIMED) is 0.1389 with standards deviation 0.0517, which imply that the economy policy uncertainty index during period from 2012-2020 were not that fluctuated and shows quite stable economic condition. The similar interpretation also applied for EPU measured by using average value.

Table 1. Descriptive statistics

	N	min	max	Mean	Median	Std. Dev.
AbsAEM1	1800	0	8.3074	.7232	.2793	1.2677
AbsAEM2	1800	.0036	8.4181	.7646	.3161	1.2837
Abs_REM	1800	.0005	19.2406	1.6584	.5713	3.2698
MTB	1800	-15.07	26.19	1.5169	.81	4.5318
GROWTH	1800	-.82	2.71	.0394	.01	.4192
LEV	1800	0	3.59	.3049	.21	.4394
SIZE	1800	8.57	16.21	12.4186	12.47	1.6533
CFO	1800	-.3	.96	.0856	.04	.1738
WUIAV	1800	.07	.23	.1544	.17	.0508
WUIMED	1800	.06	.22	.1389	.12	.0517
absabncfo	1800	.0001	.9543	.107	.0597	.1496
absabndiscexp	1800	0	25.1973	1.6908	.4908	3.8302
abs abprod	1800	0	1.6532	.1567	.0654	.2683
GDP	1800	-2.07	6.03	4.4106	5.033	2.3168
ROA	1800	-11.67	39.36	3.7582	3.86	4.8942

This table presents descriptive statistics from several firm specific variables during 2012-2020 along with two country variables. Data are winsorized at the 1st and 99th percentiles. *AbsAEM1 and AbsAEM2* are represent AEM measurement using DD model and Kothari model. Abs_REM represent real earnings management measured by adopting Roychowdurry model (2016). MTB is market-to-book ratio of common equity. *SIZE* denotes the natural logarithm of total assets. *ROA* is a ratio of net income of total assets. *LEVERAGE* calculated as total debt divided by total assets. *CFO* is cash flow from operation divided by total asset. *WUIMED* and *WUIAV* denote economy policy uncertainty index using median value and average value, respectively. GDP is gross national product measured by GDP growth rate.

4.2. Main Result

This study uses Equation (3) to (4) to test whether EPU cause manager to switch-off from AEM to REM. I start by examining the association between EPU and REM. I regress equation (3) first to

capture the idea that manager engage REM during the period, before the end of fiscal year. This study adopts pooled ordinary least squares (OLS) regressions with robust standard errors clustered by firm and year [64] and also include year fixed effect.

Estimations involving equation (3) with REM as the dependent variable are displayed in Table 1, column (1). With a positive (=1,3623) and statistically significant (at the 1% level) coefficient of EPU, we can infer that an increase in EPU leads to more REM activity. On the other hand, greater EPU leads to lower AEM, as indicated by the negative and statistically significant coefficient (= -0.1076) for EPU in column (2). These findings suggest that increased EPU may lead to managers decreasing their use of AEM in favor of REM. The findings giving support for the second hypothesis and are consistent with previous research [21, 28, 29].

Column (2), present regression of AEM on EPU and several control variables. As shown in column (2), the coefficient of EPU is negative (-1078) and statistically significant at 5% level, implying that EPU can discourage managers from engaging in AEM. I also find that UnexpectedReal has a significant positive coefficient (0.3423) at 1% level. High level of economic uncertainty provides disincentive environment for manager to manipulate the reported earnings as stakeholders and investors may require firms to increase disclosure and transparency to reduce the information asymmetry. During high uncertainty, financial analysts and the media can provide additional information to outsiders. Finally, investors may react negatively if firm operations and investment decisions are not disclosed and outsiders can detect the manipulation as AEM is subject to auditor and regulator attention, implying it is too risky for firm engaging AEM during EPU. Current study support findings from [39, 53]. In general, as the prediction that REM will have positive coefficient and AEM shows negative coefficient, this study supports the substitute hypothesis and in line with prior empirical work from [21, 28, 32, 29]. This study claims that because of high EPU, manager tend to switch from AEM to REM to achieve the desired earnings number to be represented in the financial statement.

As for the control variable, Table 1 column (1) shows that FCF, SIZE, and ROA shows positive and significant result while GDP and the implementation of IFRS shows negative and significant findings. Other control variables are not significant. In column (2) only GROWTH and LOSS show no result, but other control variables present significant result.

Table 1. Baseline Result

	(1) REM1	(2) AEM1
EPU	**1.3623*** **	**-.1076** **
	(.0916)	(.0414)
MTB	-.0067	.0008
	(.0168)	(.0041)
LEV2	.0648	-.1956***
	(.1464)	(.0157)
FCF	1.6185***	-.385***
	(.2862)	(.0875)
CFO	.5808	-.5786***

	(.3403)	(.1227)
GROWTH	.3655	-.0308
	(.2487)	(.0982)
LIT	.1833	-.3243***
	(.1554)	(.0324)
SIZE	.2435***	.1368***
	(.0648)	(.0107)
ROA_MED	.0691*	-.0407***
	(.0368)	(.0056)
LOSS	-.1465	.0524
	(.1246)	(.0392)
IFRS	-.9332***	.4516***
	(.0296)	(.0071)
GDP	-.0199*	-.0082*
	(.0092)	(.0038)
UnexpectedREM		.3413***
		(.0066)
Constanta	-.8773	-1.6255***
	(.6296)	(.1321)
Observations	1800	1800
R-squared	.0809	.1169
Year dummy	YES	YES
Std err clustered year	YES	YES

This table reports results of pooled regressions of earnings management on EPU using equation (3)and (4) with standard errors clustered by firm and year, which indicated in the parenthesis. Column (1) present the association between REM and EPU, while column (2) shows the regression result from the association between AEM and EPU. The variables are defined in table 1. The regressions also include year fixed effects. *** p<0.01, ** p<0.05, * p<0.1.

4.3. Robustness test

This study conducts multiple robustness tests using various measurements of independent and dependent variables, as shown in Table 3. **First**, I apply an alternative measurement for AEM by adopting the model developed by [65] ***Second***, I use two alternative measurements for EPU: average value of EPU and COVID-19 period as a reflection of economic uncertainty. These result shows in Table 2. ***Third***, I use three alternative measurements by using individual proxy from REM: abnormal cash flow, abnormal discretionary expense, and abnormal production cost. ***Fourth***, I use the lag value of EPU as an alternative measurement of EPU. I use lag value from average EPE and median EPU to tackle the possibility endogeneity problem**.** Unreported result, in general, confirm that our model is robust for several alternatives' measurement and conditions.

Table 2: Robustness tests using alternative measurement of AEM and EPU

	(1)	(2)	(3)	(4)	(5)	(6)
	Abs_REM	AbsAEM2	Abs_REM	AbsAEM1	ABS_REM	AbsAEM1
EPU	**1.3623*** **	**-.1598*** **				
	(.0916)	(.0413)				
EPU_AV			**1.8397*** **	**-.1439** **		
			(.1237)	(.0554)		
COVID19					**.2216*** **	**-.0161** **
					(.0149)	(.0062)
MTB	-.0067	.0056	-.0067	.0008	-.0067	.0008
	(.0168)	(.0041)	(.0168)	(.0041)	(.0168)	(.0041)
LEV2	.0648	-.1888***	.0648	-.1955***	.0648	-.1952***
	(.1464)	(.0141)	(.1464)	(.0157)	(.1464)	(.0156)
Others control Variables are included	YES	YES	YES	YES	YES	YES
UnexpectedREM		.359***				
		(.0067)				
UnexpectedREM				.3405***		
				(.0063)		
UnexpectedREM						.335***
						(.0046)
Constanta	-.8773	-1.6476***	-1.0648	-1.6116***	-.8937	-1.6298***
	(.6296)	(.1336)	(.6319)	(.1313)	(.6298)	(.1324)
Observations	1800	1800	1800	1800	1800	1800
R-squared	.0809	.1223	.0809	.1169	.0809	.1169

This table reports robustnesst test results of pooled regressions of earnings management on EPU using various alternatives measurement from AEM and EPU, with standard errors clustered by firm and year, which indicated in the parenthesis. All variables are defined in table 1. The regressions also include year fixed effects. *** p<0.01, ** p<0.05, * p<0.

4.4. Additional test

I next extend the main analysis by incorporating two major issues to provide furthered evidence on how EPU can affect manager choices to shift between EM strategy. first, I consider examining the role of firm leverage condition on the association between EPU and the switch-off strategy. [23, 66], suggest that firms with significant leverage are more sensitive to EM through accruals, which reduces AEM. However, the study does not support a possible shift toward REM. Following debt covenant hypothesis, previous empirical work documented that highly leverage firm has strong incentives to manage earning through AEM or REM to avoid debt covenant violation [32, 38]. Accordingly, we predict that high leverage firms will be more likely to experience the switch-off between EM strategy compared to low leverage firms. Therefore, we predict that the coefficient of EPU in preceding firms will be higher than the later.

To test this prediction, I divide the full sample into 10 decile groups. The group which falls between 6th-10th decile will be assign as High leverage firms and the group between 1st-5th decile will be categorize as small leverage firms. I re-examine in each group using equation (3) and (4) and the result presented in table 5 column (5) to (8).

In line with the estimation that the EPU coefficient in high leverage firms will be higher than the low leverage firm, Table 3 Colum (5) to (8) evidence this prediction. This result also in line with our primary findings and confirm that there is a switch-off effect from AEM to REM for high leverage firm, implying that high leverage firms are prone to conduct shifting between EM strategy.

Second, as suggested in financial accounting literature that firm can choose income increasing or income-decreasing pattern to beat the earnings target, I furthered examine the possibility that income-increasing firm or income decreasing firm shift between EM strategy. [30, 17] suggest that managers are more motivated to participate in income-increasing EM in order to avoid disclosing losses. Contrary, when they face bad earning news, they tend to do "big bath accounting" by under-report earnings (income-decreasing pattern) aiming to achieve the earnings target easier in the next period [57] Whether income increasing firm or income-decreasing firms, they have motivation to manage the earnings target strategically by switching-off between AEM and REM.

To examine the production, I divide the full sample into income increasing and income-decreasing group based on ROA. I divide the full sample into 1o decile of ROA and assign firm that falls in 6th to 10th decile as income-increasing group while sub-sample which falls in 1st-5th decile assign as income-decreasing firms. Next, I run separately the equation (3) and (4) to find out whether both group conduct switch-off strategy to manage the reported earnings. Table 3 column (1) to (4) present the result. Income increasing group shows the switch-off between AEM to REM as reported in table 2. However, we find that income-decreasing group have more incentive to engage REM and we do not find potentially switch-off effect in the income-decreasing sub sample.

Table 3. Additional Test: Additional test: a) income increasing Vs income decreasing[1] and 2) High Leverage and Low leverage

	(1) Abs_REM1	(2) AbsAEM1	(3) Abs_REM1	(4) AbsAEM1	(5) Abs_REM1	(6) AbsAEM1	(7) ABS_REM1	(8) AbsAEM1
	Income	increasing	Income	Decreasing	High	leverage	Low	Leverage
EPU_MED	**3.142*** **	**-3.9528*** **	**.7148*** **	.0358	**2.1197*** **	**-.572***	**.9896*** **	.4005*** **
	(.1036)	(.3025)	(.1846)	(.1166)	(.5961)	(.3062)	(.1906)	(.0602)
MTB	-.0298*	.0391***	.0081	-.004	-.0102	-.009	-.001	.0141
	(.0158)	(.006)	(.0327)	(.0127)	(.0123)	(.0053)	(.0347)	(.0122)
LEV2	-.141	-.0926	.1417	-.1756***	-.286	-.0955*	.2561	-.2504***
	(.2788)	(.0773)	(.1305)	(.0363)	(.2135)	(.0453)	(.206)	(.0451)

[1] This model does not include LOSS as control variable due to collinearity problem.

FCF	2.9206***	-3.6013***	.1634	-.1575	1.5036**	-.4036**	1.6363***	-.3143**
	(.4783)	(.1531)	(.23)	(.0938)	(.6044)	(.159)	(.1948)	(.1042)
Others control Variables are included	YES	YES	YES	YES	YES	YES	YES	YES
UnexpectedREM		1.3672***						
		(.0795)						
expected REM				.2944***				
				(.0101)				
expected REMV						.3635***		.3258***
						(.0221)		(.0074)
Constant a	.4632	-3.4427***	-1.7385	-.6666**	-.0886	-.5284	-1.6974**	-2.1683***
	(.4815)	(.4447)	(1.1602)	(.224)	(1.0228)	(.3806)	(.5378)	(.197)
Observations	900	900	900	900	874	874	926	926
R-squared	.1062	.1533	.1074	.1057	.1043	.0806	.0804	.1736

This table reports additional test to examine relationship between EPU and EM switch-off for sub-sample from 1)high leverage firms Vs low leverage firm and 2) income increasing Vs Income decreasing firms using pooled ordinary least squared regressions with standard errors clustered by firm and year, which indicated in the parenthesis. All variables are defined in table 1. The regressions also include year fixed effects. *** p<0.01, ** p<0.05, * p<0.

5. Discussion and Conclusions

Prior research has shown that firms can strategically report earnings using AEM and/or REM; however, few studies have directly studied the impact of EPU on managers' strategic EM reporting decisions. Current study predicts that, in Indonesia's where the level of EPU is high, manager tend to switch from AEM to REM to achieve the earnings target because relying on both EM strategy will be more costly for firm under high EPU environment. It is safer for firm to substitute from AEM to REM as the later receive less attention from auditors and regulator and more difficult to detect by outsiders.

The empirical finding shows that EPU is positively associate with REM and negatively associate with AEM, suggesting that firms use the substitute strategy regarding the EM choices to manage the earnings number under uncertainty environment. I also find that high leverage firm are more likely to engage the switch-off strategy than the low leverage firm. Income increasing firm also shows similar behavior. However, we can only find that income decreasing firms are more

likely to manage their earnings number through REM and we cannot find any possibility that switch-off strategy occurs for income decreasing firms.

My findings have several implications for both researchers and regulator. This study claims substitute hypothesis for EM strategy. Only rely on one examination on EM form, such as focusing on AEM or REM only, may not give fully explanation on how manager behave on EM strategy. For the policymakers, more disclosure on real activity under uncertainty period is quired to mitigate manager's incentive in conducting REM.

This study is subject to several limitations which can be seen as an opportunity to extend similar topics in the future. First, result of this study can only be generalize in Indonesia capital market. Although my study will be the first which examining the possible effect of EPU on manager's strategic EM choices, future research can take into account international data using more emerging market countries. Second, next research can include endogeneity test to provide stronger analysis. Third, because of data limitation, we cannot include corporate governance characteristics as control variable. Future works can incorporate these factors in the regression model.

References

[1] Ma, Huanyu & Hao, Dapeng.: Economic policy uncertainty, financial development, and financial constraints: Evidence from China, International Review of Economics & Finance, Elsevier, vol. 79(C), pages 368-386. (2022.)

[2] Brogaard, J., Detzel, A.: The asset-pricing implications of government economic policy uncertainty. Manage. Sci. 61 (1), 3–18. (2015)

[3] Baker, S.R., Bloom, N., Davis, S.J: Measuring economic policy uncertainty. Q. J. Econ. 131 (4), 1593–1636. (2016)

[4] Pastor, L., Veronesi, P: Uncertainty about government policy and stock prices. J. Financ. 67 (4), 1219–1264. (2012)

[5] Kang, W., Lee, K., Ratti, R.A.: Economic policy uncertainty and firm-level investment. J. Macroecon. 39, 42–53. (2014)

[6] Gulen, H. and Ion, M.: Policy uncertainty and corporate investment, The Review of Financial Studies, Vol. 29 No. 3, pp. 523-564. (2016),

[7] Nick Bloom, Bond, S., & van Reenen, J.: Uncertainty and Investment Dynamics. The Review of Economic Studies, 74(2), 391–415. http://www.jstor.org/stable/4626145. (2007).

[8] Osei ,P.M., Reginald D, and Anokye M.: Economic Policy Uncertainty Linkages among Asian Countries: Evidence from Threshold Cointegration Approach. Hindawi: Discrete Dynamics in Nature and Society, Volume 2021, Article ID 6656176, (2021) https://doi.org/10.1155/2021/6656176

[9] Habib, A. and Hossain, M.: Accounting conservatism, environmental uncertainty and the capital structure, Corporate Ownership and Control, Vol. 11 No. 1, pp. 123-135. (2013). doi: 10.1016/ S0165-4101(00)00024-0.

[10] Haque, A., Fatima, H., Abid, A. and Qamar, M.A.J.: Impact of firm-level uncertainty on earnings management and role of accounting conservatism, Quantitative Finance and Economics, Vol. 3 No. 4, p. 772. (2019). doi: 10.3934/QFE.2019.4.772.

[11] Yung, K. and Root, A.: Policy uncertainty and earnings management: international evidence, Journal of Business Research, Vol. 100, pp. 255-267. (2019)

[12] Jin, J.Y., Kanagaretnam, K., Liu, Y. and Lobo, G.J.: Economic policy uncertainty and bank earnings opacity, Journal of Accounting and Public Policy, Vol. 38 No. 3, pp. 199-218. (2019)

[13] Hejranijamil, M., Hejranijami, A., and Allameh J. S.: Accounting conservatism and uncertainty in business environments; using financial data of listed companies in the Tehran stock exchange, Asian Journal of Accounting Research Vol. 5 No. 2, 2020 pp. 179-194. (2020). doi 10.1108/AJAR-04-2020-0027
[14] Dhole, S., Liu, L., Lobo, G. J., & Mishra, S.: Economic policy uncertainty and financial statement comparability. Journal of Accounting and Public Policy, 40(1), 106800. (2021). doi:10.1016/j.jaccpubpol.2020.106800
[15] Roma, C.M.d.S., Louzada, L.C., Roma, P.M.d.S., Goto, H. and Souma, W.: Earnings management, policy uncertainty and firm life cycle stages: evidence from publicly traded companies in the USA and Brazil, Journal of Financial Economic Policy, Vol. 13 No. 3, pp. 371-390. (2021). https://doi.org/10.1108/JFEP-02-2020-0031
[16] El Ghoul, S., Guedhami, O., Kim, Y. and Yoon, H.J.: Policy uncertainty and earnings management, Working paper, SSRN 3097884, (2018)
[17] Roychowdhury, S.: Earnings management through real activities manipulation, Journal of Accounting and Economics 42, 335–370. (2006)
[18] Cohen, D. A., and P. Zarowin.: Accrual-based and real earnings management activities around seasoned equity offerings, Journal of Accounting and Economics 50, 2–19. (2010)
[19] Graham, J. R., C. R. Harvey, and S. Rajgopal.: The economic implications of corporate financial reporting, Journal of Accounting and Economics 40, 3–73. (2005)
[20] Gunny, K. A.: The relation between earnings management using real activities manipulation and future performance: evidence from meeting earnings benchmarks, Contemporary Accounting Research 27, 855–888. (2010)
[21] Zang, A.: Evidence on the trade-off between real activities manipulation and accrual-based earnings management. Accounting Review, 87 (2), 675–803. (2012)
[22] Doukakis, L.C.: The effect of mandatory IFRS adoption on real and accrual-based earnings management activities. J. Account. Public Policy 33, 551-572. (2014)
[23] Oz, Onur Ibrahim and Tezer Yelkenci.: Examination of real and accrual earnings management: A cross-country analysis of legal origin under IFRS. International Review of Financial Analysis 58, 24-37. (2018)
[24] Dechow, P. M., and D. J. Skinner.: Earnings management: reconciling the views of accounting academics, practitioners, and regulators, Accounting Horizons 14, 235–250. (2000)
[25] Alhadab, M., I. Clacher, and K. Keasey.: Real and accrual earnings management and IPO failure risk, Accounting and Business Research 45, 55–92. (2015)
[26] Ipino, E., and A. Parbonetti.: Mandatory IFRS adoption: the trade-off between accrual-based and real earnings management, Accounting and Business Research 47, 91–121. (2017)
[27] Badertscher, B. A.: Overvaluation and the choice of alternative earnings management mechanisms, The Accounting Review 86, 1491–1518. (2011)
[28] Sohn, B.C.: The effect of accounting comparability on the accrual-based and real earnings management. J. Acc. Publ. Pol. 35 (5), 513–539. (2016)
[29] Januarsi, Yeni & Tsung-Ming Yeh.: Accounting Comparability and Earnings Management Strategies: Evidence from Southeast Asian Countries, Emerging Markets Finance and Trade,. (2022). doi: https://doi.org/10.1080/1540496X.2022.2075258
[30] Chen, Chin-Lung., Huang Su-Hui., and Fan, Hung-Shu.: Complementary association between real activities and accruals-based manipulation in earnings reporting. Journal of Economic Policy Reform, Vol. 15, No. 2, June 2012, 93–108. (2012)
[31] Martens, W., P. Yapa, and M. Safari.: The impact of financial statement comparability on earnings management: Evidence from frontier markets. International Journal of Financial Studies 8 (73):1–25. (2020). doi:10.3390/ijfs8040073.
[32] Gao, Jie., Gao, Baichoa., and Wang, Xiao.: Trade-off between real activities earnings management

and accrual-based manipulation-evidence from China. Journal of International Accounting, Auditing and Taxation 29, 66-80. (2017)
[33] Li, Leon.: Is there a trade-off between accrual-based and real earnings management? Evidence from equity compensation and market pricing. Finance Research Letters 28, pp. 191-197. (2019)
[34] Bermpei, T., Kalyvas, A.N., Neri, L. et al. Does economic policy uncertainty matter for financial reporting quality? Evidence from the United States. Rev Quant Finan Acc **58**, 795–845 (2022). https://doi.org/10.1007/s11156-021-01010-2
[35] Leuz, Christian., Nanda, D., and Wysocki, P.D.: Earnings management and investor protection: an international comparison. Journal Of Financial Economics. 69, pp. 505-527. (2003)
[36] Al-Thaqeb SA, Algharabali BG, Alabdulghafour KT. The pandemic and economic policy uncertainty. Int J Fin Econ. (2020) ;1–11. https://doi.org/10.1002/ ijfe.2298
[37] Abernathy, J. L., B. Beyer, and E. Rapley:. Earnings management constraints and classification shifting. Journal of Business Finance & Accounting 41 (5–6):600–26. (2014). doi:10.1111/jbfa.12076.
[38] Anagnostopoulou, S.C., Tsekrekos, A.E.: The effect of financial leverage on real and accrual-based earnings management. Accounting and Business Research, 47(2), 191-236. (2016.)
[39] Jiang, L., Pittman, J., & Saffar, W.: Policy uncertainty and textual disclosure. SSRN Electronic Journal, https://doi.org/10.2139/ssrn.3015420. (2017)
[40] Knight, F.H.: Risk, Uncertainty and Profit, Courier Corporation. . (2012)
[41] Heinsalu, S.: Equivalence of the information structure with unawareness to the logic of awareness, Paper Presented at the Proceedings of the 13th Conference on Theoretical Aspects of Rationality and Knowledge. (2011)
[42] Schipper, K.: Commentary on Earnings Management. Accounting Horizons, 3(4), 91-102. (1989)
[43] Healy, P. M., and J. M. And Wahlen.: A review of the earnings management literature and its implications for standard setting. Accounting Horizons 13 (4):365–68. (1999). doi:10.2308/acch.1999.13.4.365.
[44] Beneish, M. D.: Earnings management: A perspective. Managerial Finance, 27(12), 3-17.
[45] Ewert, R., & Wagenhofer, A., 2005. Economic effects of tightening accounting standards to restrict earnings management. Accounting Review, 80(4), 1101-1124. (2001)
[46] Cheng, Q.; J. Lee; and T. Shevlin.: Internal Governance and Real Earnings Management. The Accounting Review, 91 (4): 1051-1085. (2016.)
[47] Diri, M.E, Lambrinoudakis, C, Alhadab, M.: Corporate governance and earnings management in concentrated markets. Journal of Business Research 108 (2020) 291–306. (2020)
[48] Dong, Nanyan, Wang, Fangjun, Zhang, Junrui, Zhou , Jian.: Ownership structure and real earnings management: Evidence from China. J. Account. Public Policy 39, 106733. (2020.)
[49] Zalata, A., Tauringana, V., Thingbani, I. Audit committee financial expertise, gender, and earnings management: Does gender of the financial expert matter? International Review of Financial Analysis 55 (2018) 170–183. (2018)
[50] Marra, A., Mazzola, P., & Prencipe, A.: Board monitoring and earnings management pre-IFRS and post IFRS. International Journal of Accounting, 46(2), 205-230. (2011)
[51] Choi, A., J. Choi, and B. Sohn.: The joint effect of audit quality and legal regime on the use of real earnings management: International evidence. Contemporary Accounting Research 35 (4):2225–57. doi:10.1111/1911- 3846.12370. (2018)
[52] Francis, Bill., Hasan, Iftekhar., and Li, Lianxiang.: A cross-country study of legal-system strength and real earnings management. J. Account. Public Policy 35, pg. 447-512. (2016)
[53] Nagar, V., Schoenfeld, J., & Wellman, L.: The e ff ect of economic policy uncertainty on investor information asymmetry and management disclosures. Journal of Accounting and Economics, 67(1), 36–57. ((2019). https://doi.org/10.1016/j.jacceco.2018.08.011
[54] Kim, J.-B., Li, L., Lu, L.Y., Yu, Y.: Financial statement comparability and expected crash risk. J.

Account. Econ. 61 (2), 294–312. (2016)
[55] Boone, A.L., Kim, A., White, J.T.: Political Uncertainty and Firm Disclosure'. Vanderbilt Owen Graduate School of Management Research Paper. (2018)
[56] Bird, A., Karolyi, S.A., Ruchti, T.G.: Political uncertainty and corporate transparency. Available at SSRN. https://ssrncom/abstract=2986678. (2017)
[57] Hope, Ole-Kristian and Wang, Jingjing.: Management deception, big-bath accounting, and information asymmetry: Evidence from linguistic analysis. Accounting, Organization and Society (70), 33-51. (2018)
[58] Caggiano, G., Castelnuovo, E., & Kima, R. (2020). The global effects of Covid-19-induced uncertainty. Economics Letters, 194, 109392. doi:10.1016/j.econlet.2020.109392
[59] Dechow, P.M., Dichev, I.D.: The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. Account. Rev. 77, 35–59. (2002)
[60] Peek, E., Meuwissen, R., Moers, F., Vanstraelen, A.: Comparing Abnormal Accruals Estimates across Samples: An International Test. Eur. Account. Rev. 22, 533–572. (2013)
[61] Francis, J., Huang, S., & Khurana, I.: The role of similar accounting standards in cross-border mergers and acquisitions. Contemporary Accounting Research, 33(3), 1298–1330. (2015)
[62] Halabi, Hussein., Alshehabi, Ahmad., and Zakaria, Idlan.: Informal institutions and managers' earnings management choices: Evidence from IFRS-adopting countries. Journal of Contemporary Accounting and Economic 15, pp.100162. (2019)
[63] Francis, Bill., Hasan, Iftekhar., and Li, Lianxiang.: A cross-country study of legal-system strength and real earnings management. J. Account. Public Policy 35, pg. 447-512. (2016)
[64] Petersen, M.: Estimating standard errors in finance panel data sets: Comparing approaches. Review of Financial Studies, 22, 435–480. ((2009)
[65] Kothari, S. P., A. J. Leone, and C. Wasley.: Performance matched discretionary accrual measures. Journal of Accounting and Economics 39 (1):163–97. (2005). doi:10.1016/j.jacceco.2004.11.002.
[66] Aharony, J., Lin, C.-J., & Loeb, M. P.: Initial public o!erings, accounting choices, and earnings management. Contemporary Accounting Research, 10(1), 61–81. (1993)