IMPACT OF REAL MANIPULATION AND TAX COMPLIANCE ON STRATEGY MODEL: A SIMULATIVE PREDICTION OF THE FUTURE CERTAINTY

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Abstract

High awareness of obedience and compliance is a fundamental requirement in monitoring going concerned, reflecting a critical role of meaningful accounting information. This research tested earnings quality to measure belief and faith in achieving a sustainable business as optimism and confidence in the better one. The collecting data concerned the listed manufacturing company during 2010-2021, where purposive sampling and moderated regression with dummy variables were to capture the strategy topologies. The causal research observed amounted to 214 companies, illustrating that the number of valid observations has been 1.278 samples. The finding depicts the mapping of the investor reaction to quality accounting information related to this rational decision model in predicting the high future certainty as a positive signal. Bayes Teorema and Decision Tree Model are used to distinguish the prospective company as a highly guaranteed information; the social responsibility of the regulator is to minimize the distortion by implementing the going-private procedure for the low-prospected one; pragmatically, one platform of financial reporting service is to deduct a minimum chance for opportunity accruals. As a new insight into the literature in accounting, this simplex-linear programming has been modified into an innovative portfolio as an artificial intelligence model to maximize each utility.

Keywords: Future Cash Flow Operational To Equity; Real Manipulation Activity; Real Manipulator; Non-Manipulator

JEL Classification: M21, M41, G32, G17

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INTRODUCTION

Recently, high-quality accounting information has been proven to positively impact the movement of market price when Nguyen et al.,(2022) underlined that manipulation activity has distorted the actual performance, which created a barrier in illustrating real earnings. This handicap stimulated the volatile fluctuation of market price as a phenomenon, where all investor has a different perception of interpreting this accounting information. In this research, this rational decision model has been explored by concrete awareness of high-quality financial reporting in characteristics of decision-making in the institutional investor; this reference is based on Mehrani et al., (2017), Ramalingegowda et al., (2021) and Sakaki et al., 2021). Temporarily, this institutional investor has been dominant proportions when compared to the others, Bao &

Lewellyn, (2017) and Garel et al., 2021) pointed out this pattern has a significant contribution positively on the market price, it is aimed to stress on the usefulness accounting information and investor action, where firstly stated by Ball & Brown, (1968) as proof in measuring the relevance value of this information; then, Scott, (2016) has explained that the accounting treatment policy has two aspects of efficient contracting and opportunity motives, it means that accruals treatment has been widely opened chance, which has the negative perception in detecting the misleading information; this same viewpoint has been strengthened by Martínez-Ferrero et al., (2016), when the releasing the meaningless disclosure is aimed to hidden the opportunity motives as an obstacle in calculating the future value precisely; it related to the movement of agency cost as an effect in anticipating any violation. This willingness of opportunity behavior has been proved by Dichev et al., (2016), where the subjective judgment as an implication of agency theory is used to insert a piece of distorted information because of high flexibility in accounting policy; Kothari, (2001) and (Zarowin, 2015) emphasized this economics consequence is a pattern of earnings management, where is supported by the gap between tax-book accruals, commonly known as this social-political cost effect (González-Sánchez et al., 2023).

The high earnings quality has positively stimulated the smooth movement of market price as a sign of no volatile fluctuation; the higher efficiency and utilization are positive indicators, referring to the signal effect. This measurement of high obedience and compliance is related to the positive willingness to carry out all regulations legally, particularly the accounting standard and tax regulation. The role of obedience to accounting standards has proven to stimulate the positive movement of market price, Felix, (2022) pointed out that this positive impact is a sign of obtaining the cost of capital as a low risk, and Islam et al.,(2022) tested that this obedience is a principal component in gaining the flexible financing in expansion activity as a strategic advantage of high-quality measurement. The zero tolerance on tax exposure elicited the high volatility of agency cost, (Wang et al., 2018), Uzezi, (2022) has linked this compliance to a fundamental prerequisite of proper tax management. In contrast, Yorke et al., (2016) and Osegbue et al., (2018) stated that any form of tax saving as opportunistic tax accruals negatively contributed to the tax exposure so that it related to the volatile fluctuation of agency cost as a significant consequence of any violation. Explicitly, obedience and compliance is the variable of quality measurement, so the earnings quality illustrates the optimism of grabbing the better prospect, and the high growth of business indicator is a sign of high sustainability. In contrast, Datta et al.,(2013) and Sanusi et al., (2023) found a positive perception of accounting information initiated meaningfully the higher future value. The high accuracy of accounting information positively contributes to the expected return, illustrated by a low risk and high probability of high business existence. This research has collected data from listed manufacturing companies because of the trickle-down effect in stimulating the positive contribution to macroeconomic indicators. Based on Eldomiaty et al., (2020) and Wang & Li, (2020), the positive expected return has triggered extensively achieving full employment as a sign of low inflation in macroeconomic indicators, which inspires this research in testing the impact of high earnings quality in the manufacturing industry. Based on growth entrants in this sector, this performance is less attractive, so this comparison between the existing and entrant firms can be presented in Table 1 (The details can be provided in Appendix I).

Table 1. The Illustration Of Manufacturing in the Industry Sector

Description	2020	2021	2022	Average
Growth All Listed Companies	3.63%	7.43%	5.74%	5.61%
Growth Of Listed Manufacturing Companies	6.52%	9.18%	5.61%	7.11%
Growth Entrants in Manufacturing Industry Sector	−23.53%	38.46%	−16.67%	−0.58%
Going Private Procedure	0	0	0	

Note: Compiled from The Indonesia Capital Market (IDX, 2021) For more illustrations can be seen in Appendix I

Table 1 shows that this performance in this industry sector has contributed positively to the total concentration of high earnings quality can be examined in the annual average growth of all listed companies, particularly the manufacturing industry sector. This negative proportion is an effect of the reduction of supply and demand during the pandemic covid; on the side, the management in this sector has a positive perception of obtaining better prospects. This illustration had been an essential precondition for illustrating a high or low-prospected company, protecting investors from intercepting the distortion related to opportunistic behavior (Idris et al., 2022; Alam et al., 2022); this phenomenon of manipulation activity as negative earnings management has been explained by the theoretical model of the rational decision model in anticipating a total loss, related to the use of high-quality financial reporting, and this model in maximizing each utility by providing this comprehensive simulation with an innovative portfolio based on the linear programming model. This linearity model has been adopted from the prospect theory, Kahneman & Thaler, (2006) pointed out that better prospects had formed individually based on past experiences.

There are some theoretical contributions to broaden the literature of accounting, particularly a simulative mapping of the rational decision model. Principally, there is a different business model: the real or non-manipulator and high or low compliance as a guideline in detecting the better one; this research explores this model in implementing the real manipulation activity. Firstly, there is proof of a relationship between marketing and accounting, illustrating that optimism for better future performance has been a key to substantial compliance (Datta et al., 2013). This similar result has been supported by Sanusi et al., (2023) when the highly increased sales growth is an indicator of high sustainability; indirectly directed to the low-risk company, where the forming oligopolistic market structure is aimed to reach expected returns when Lei & Gu (2016) and Wang et al. (2023) supported this result. A new insight into mapping the high sustainability and high-quality accounting information has proven the pattern of this decision model, in which each party has an initiative to the maximum utility; Askari et al. (2019) accentuated this max-min decision model is used to predict the other party's response when accounting information and a sustainability strategy have positively the strong correlation.

Secondly, this research has developed the prediction model by calculating the probability of investor reaction to accounting information, where Franklin & Morris (2002) and Hutton & Stocken (2021) used the Bayesian model as a supporting analytical tool for mapping an investor's reaction, including a newly simulative mapping with the simplex-linear programming model as based on Trippi & Lee (1996). This research has tested awareness of high-quality information, which has been a fundamental requirement of illustrating the "good prospect" process to intercept the peach-lemon effect; this effect happens when the investor has a handicap in distinguishing the high prospect company because of

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opportunity motive. The innovative portfolio can be used as protective model information in monitoring the ongoing concerned process when the asymmetric information significantly affects the different viewpoints of expectation and performances as a fundamental factor in smoothing the volatile market price movement, which the decision tree model indicates as a predictive model by mapping investor behavior and management decision

As a consequence of prudent accounting treatment, earnings quality can be considered a quality measurement of trust in obedience and compliance related positively to guaranteeing a future expected return; Qiu & Zhang, (2022) are concerned the delisting policy is to maintain high trust. Based on Table 1, no low-prospected manufacturing company should have the going private procedure, which means the regulator should push on the management to drive up future performance as the snowball effect, referring to keeping on high attractiveness. Implementing this procedure is to keep the high trust to minimize the opportunity motives; finally, the regulator should design a punishment and reward system for publishing high-quality accounting information to distinguish the better one. The significance of this research is to provide this predictive simulation as a max-min decision model to protect the investor for suffering the total investment loss because of opportunity behavior; Bayes Theorem and Simplex Linear programming as the original predictive model based on the mutual relationship between the decision usefulness accounting and positive perception, interrelated positively to the smooth movement of market price

The first section depicts the introduction, followed by the literature review and the development of hypotheses; the next section focuses on the methodology and sampling model. The fourth section features statistical testing and discussion, which covered theoretical and practical implications; the last section is the conclusion. Recommendation, future research.

LITERATURE REVIEW

The Positive Accounting Theory points out the social and political cost of accounting information pushing on opportunity behavior and efficient contracting in disseminating prospects (Khotari, 2001). The high-earnings quality is a concept of awareness of high obedience and compliance when the principle-based accounting standards are concerned with the fair value measurement as a standpoint of the investor's capability in detecting a distortion (Pompili & Tutino, 2019; Dempster & Oliver, 2019). As a sign of rational decision, (Chen & Wu, 2021) stressed that low obedience had generated expressively a negative perception, indicated by the unpredictable fluctuation of market price; this result encouraged this research to provide the mathematical decision analytical tool for grabbing the maximum utility. It means that the growth of critical financial instruments stimulates positive expectations as a linearity model, which is developed from the prospect theory as a reference for mapping the investors' decisions rationally (Kahneman & Thaler, 2006) and (Bandi, 2012).

This predictive linearity model has been modified by mapping the mutual relationship; Kaplan, (1996) has established the decision tree model with what-if analysis. As a comprehensive illustration of earnings quality, Bayes Theorem is used to calculate the accurate probability of each party's action as the adoption model of the learning curve. The higher growth is a sign of "good news", which reflected the existence of a rational decision model; this research provides modified simplex programming as an innovative portfolio is used to maximize the return (Trippi & Jae, 1996); this is aimed to nurture and educate all investors into changing from the meaningless speculative decision into the investment decision. This research has

proven the usefulness of accounting information as a valuable source of information; the high consistency of accounting treatment should be a crucial focus for regulators to keep on high trust in high-quality financial reporting.

Real Manipulation Activity and The Sustainability

This research uses the real manipulation activity as a quality measurement, which portrayed the highly positive characteristics of integrity in conducting high obedience and compliance, based on Perotti & Wagenhofer, (2014) and Rezaee & Tuo, (2019). This previous research pointed out the awareness of high or low violation levels with paying no attention to both positive and negative earnings, so this new measurement can be modified into real manipulation activity quality, where it can be interpreted by the positive willingness management in minimizing the biased error subjectively as a push for stimulating the positive perception of illustrating real earnings. The link between earnings persistence and manipulation activity has been explored by Jeong & Choi, (2019) and Li, (2019) underlining that this opportunity motive has a barrier to monitoring the business survival as a sign of going concerned, referring to the negative impact on the market price movement significantly. There is a high probability of grabbing the better prospect, Eng et al., (2019) pointed out the probability of implementing the manipulation activity, including the opportunity accruals; thus, when the company is in bankruptcy condition, it can be stated that manipulation is aimed to disseminate the misleading signal. Beyer et al., (2019) stated that earnings quality signposted high trust in keeping on business sustainability and the low cost of capital as a positive impact; the thoughtful attention to high-quality accounting information is a guideline for the investor to make more accurate predicttions (Alam et al., 2022; Akhter & Kalam, 2023). Based on Pompili & Tutino (2019) and Dang & Pham (2022),; earnings quality is an indicator of high certainty in predicting this return, Dempster & Oliver, (2019) and Fan et al., (2021) stressed that efficiency contracting to pave the investor out to predict the future return precisely because the most accurate real earnings. Based on Nguyen et al.,(2022) and Efendi et al.,(2023), the link between accounting information and business sustainability underlined that optimism and confidence have a positive contribution to deduct the manipulation activity, where total concentration is on the sustainable performance in the future; later, the hypothesis can be proposed as follow.

H1: *Real manipulation activity quality* positively influences the *future value*

There is a positive contribution in the link between accounting information and marketing strategy, Datta et al., (2013) proved that optimism of better prospects has triggered high obedience, and this similar result has been supported by Lei & Gu, (2016) and Sanusi et al.,(2023). Previously, El Diri et al.,(2020) and Herusetya et al., (2023) has linked the the positive impact of business strategy and model on earnings management; therefore, the hypothesis can be formulated as follow.

H1a: *Sales growth* has strengthened positively *real manipulation activity quality* on the *future value*.

The volatile market price as responsive feedback of low-prospected is an indicator of the high risk can be explained by all investors fully concentrating on “prudent” accounting treatment (Deb, 2019; Mensah & Boachie, 2023); Ezat, (2019) **l**inked to the effect of earnings quality as an indicator of low risk, Wang et al., (2018) and Islam et al., (2022) pointed out that this flexible financing is a positive effect on maintaining future performance. When high obedience has related to the agency cost as an effort to anticipate any violation, which is distortion in future performance, this high earnings quality is an indicator of

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zero probability of manipulation activity (An et al.,2016; ElHawary et al., 2022). The relationship between risk and earnings management has been tested by Ma & Yoo, (2022) and Elhaj et al., (2022), earnings quality has used minimizing the existing real manipulation activity as a guideline of low risk and a better prospect; the hypothesis can be developed as follow.

H1b: *Risk* has strengthened positively *real manipulation activity quality* on the *future value*.

Tax Management and The Sustainability

The perception of tax saving has stimulated the volatile movement of agency costs, which reflected the severe infringement on tax regulation by featuring opportunity tax accruals in tax management. Previous research has proven that aggressive tax accruals have been used to sign the existence of tax conformity as an indicator in calculating the risk of tax exposure, Ifada & Wulandari, (2015) mentioned that deducting the taxable income as a pattern of earnings management, where the negative impact on the calculating the real firm value; then tax avoidance related positively to the agency cost as a subsequent effect, Liu & Lee, (2019) proven the opportunity tax accruals has negatively contributed to the market price movement because of willingness in making the higher tax payment. The gap between book-tax accruals has been tolerated by the investor in a narrowly restricted area because of government intervention in determining the corporate tax as an implication of regulation theory, Ryu & Chae, (2014) found the adverse market reaction to the opportunity tax accruals, so that Miiller & Martinez,(2016) found this motive has the negative investor perception on the corporate image, it has declined the credit rating indirectly. Recently, the investor has the essential requirement of proper tax management, supported by Uzezi, (2022), underlining these opportunity tax accruals are related to the market confidence in quality accounting information so that this can be stated as a quality measurement of compliance with tax regulation. This same result has been strengthened by Jacob & Schütt, (2019) prioritized high certainty of tax management as the real guideline of a better prospect. As proof of the negative impact of firm value is the misleading information illustrating the actual performance, where Delgado et al., (2023) have reinforced the positive willingness to have high compliance with tax regulation deducted from this agency costs. As the previous research, Lee, (2016) and Kałdoński & Jewartowski, (2020) have linked the positive correlation between tax management and sustainable firm value, any form of aggressive tax accruals is used to predict the low-leveled going concerned as a theoretical illustrations book and tax accruals; this hypothesis can be proposed as follows.

H2: *Discretionary tax accruals quality* positively influences the *future value*

When accounting information has been proven to have a positive effect on the strategic growth of market share, this information illustrates the management capability to form a non-competitive market structure, which relates to the pricing and economic production scale (Dmitrovi & Suljovi, 2017). High sustainability is related statistically to high-quality financial reporting, which relies on financing the expansion activity (Petera et al.,2020). In the gist, the sales growth positively stimulated the willingness to level up the higher-quality accounting information. In contrast, Osegbue et al., (2018) and Wang et al., (2023) revealed that tax management is a measurement of high certainty future corporate policy as a guideline of high compliance related to the probability of grabbing better prospects; meanwhile, the hypothesis can be formulated as follow.

H2a: *Sales growth* has strengthened positively *discretionary tax accruals quality* on the *future value*.

Gorji et al.,(2023) stated that earnings quality is a measurement of low risk; when there is a minimum violation, it is related to illustrating the real earnings; then tax management can be categorized as one of the indicators of quality accounting information. This identical result has been supported by Ntokozi et al., (2022), linking a widely open chance of aggressive tax accruals related to the agency cost when this treatment can be judged as improper tax management; this is proof of opportunistic accruals. As a testing indicator of high compliance, Báez-Díaz & Alam, (2012) and Lennox et al., (2013) stress that the violation of tax regulation is a sign of low-prospected and high investment risk; the negative consequence is the volatile fluctuation of agency cost as a subsequent negative effect; thus, the hypothesis can be formulated as follow.

H2a: *Risk* has strengthened positively *discretionary tax accruals quality* on the *future value.*

For more understanding of the previous study, this research provides Appendix IV; the conceptual framework can be illustrated as Figure 1, process of calculating the estimated price prediction as Figure 2.

Figure 1 reveals that this causal research was used to test sales growth and risk as the moderated variables, related to the constructive model in distinguishing the better-prospected company with the regression dummy testing. The calculation of future value has been distinguished into two model estimation models. In the first model, this calculation has used the multistage with two stages; the second model has three stages; this estimating of multistage growth is based on Damodaran, (2012), which focused on the future cash flow operational as a predictor of future price. The moderated regression has some control variables in leveling up the correlation coefficient because this residual error measurement has a low coefficient; then, inserting some variables has a higher coefficient. The dummy variables are used to detect the better one, focusing on the pattern of real manipulation activity and tax compliance; these variables are used to estimate the positive contribution of implementing the high earnings quality. Pragmatically, high obedience and compliance as tools of quality measurement are crucial predictor factors of smoothing ominously the volatile fluctuation of market price; undeniably, the prudent accounting treatment policy in illustrating real earnings indicated high consistency, certainty, and optimism. It is a fundamental key to positive perception in generating a positive and smooth wave of market price movement.

RESEARCH METHOD

Sampling

This quantitative research as a causal model has used multiple moderated regression. The secondary data was collected during the period 2010-2021 by using ICMD (Indonesia Market Capital Directory), the Indonesia Stock Exchange (*www.IDX.co.id*), and Yahoo Finance. This research has purposive sampling to select samples with criteria observations (Sekaran & Bougie, 2016) as follows: (1) a positive average sales and earnings growth; (2) a positive average annual growth of retained earnings and Return on Asset (ROA). The population listed companies in manufacturing amounted to 214 companies, of which the total observation had about 1.694 (The details of structure data can be seen in Appendix III). The research in manufacturing has some reasons because (1) the calculation cost of production has been done in the standardized form, related to the calculating the production cost in the manipulation formula model, (2) the data of manufacturing company has a more reliable if it was compared with the other sector, (3) this industry sector has inventory in the definite value, including

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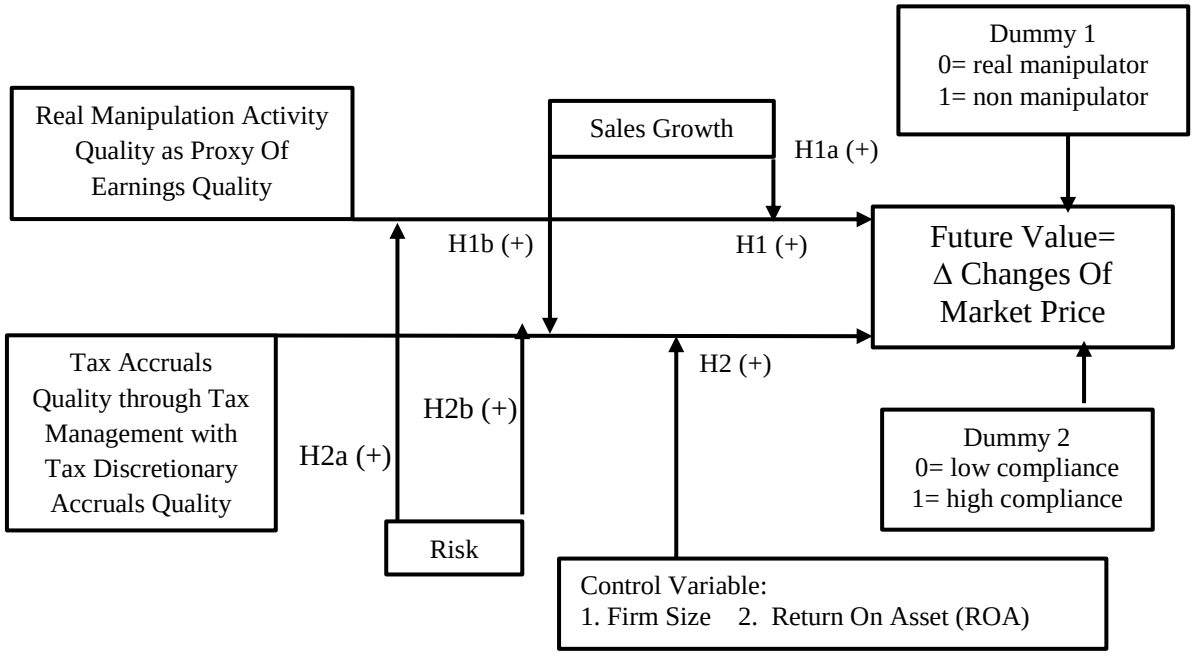
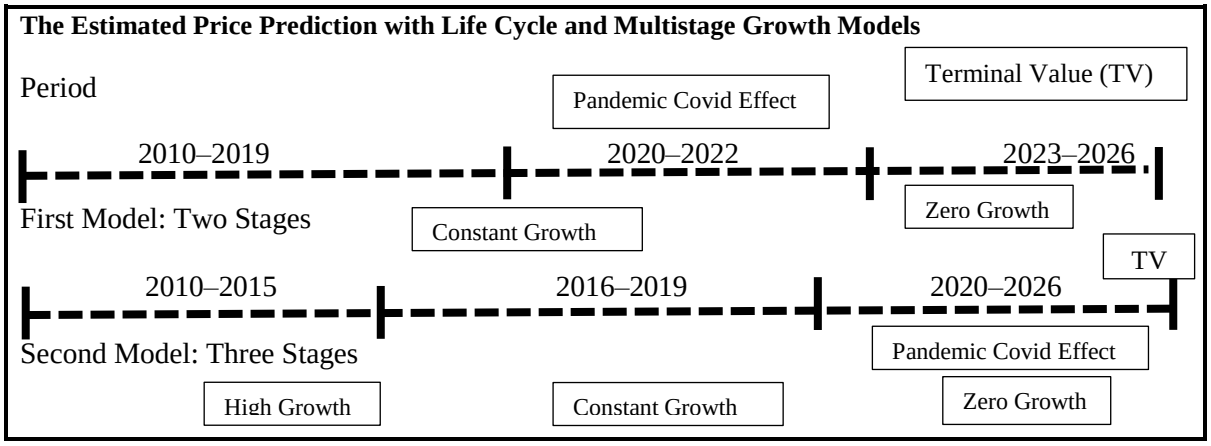
the research and development cost, can be calculated precisely.

Variables and Measurements.
Measuring new operational variables can be detailed, including future value with two models and tax management**.** The two-staged first model uses two growth models, where zero growth in the future has been used for anticipating Covid's effect by assuming no growth in the following period, where the constant growth can be treated for the previous year. The three-staged first model uses an additional model in which high growth is determined with the highest growth when this manufacturing industry sector has maximum efficiency and utilization. It can be presented as follows to understand further how to predict the future market price.



Note: Based on the objective and title of this research.

Figure 1. The Conceptual Framework Of Research



Source: *To be compiled from* (i.e., Damodaran 2012 *and* Brigham et al., 2013)

Figure 2. Process of Calculating the Estimated Price Prediction

Figure 2 showed the method of calculating the future price using free cash flow to equity in two models, which are based on the two and three stages of the H model. *Firstly*, the formula for calculating cash flow can be presented as Equation 1 (Damodaran, 2012). It can be developed into the other formula, as Equation 2.

Secondly, calculating the future price in this first model with two stages are the total of the present value of FCFE and terminal value, so the mathematical model is presented Equation 3. The second model with three stages is presented as Equation 4,

Thirdly, the predicted price can be formed by the calculation of Free Cash Flow to Equity; later the formula for future value can be presented mathematically, as Equation 5.

Finally, the monitoring of the forecasting process is conducted by the tracking signal, which this concept was adapted from Heizer et al., (2017) when the accuracy of this predicted price can be stated as a highly accurate calculation with a limited tolerance area in -2 <Tracking Signal< 2,5. This indicator is a sign of the high validity of the prediction model, where this mathematical formula can be arranged as Equation 6.

The Measurement of Real Manipulation Activity

Real earnings manipulation activity as a proxy of earnings quality implies self-confidence and determination in minimizing the manipulation activity as an opportunity motive, the three proxies are based on Jeong & Sohn, (2013) and Kothari et al.,(2016); as a new additional measurement has been developed by Srivastava, (2019) introducing a change of revenue as an abnormal component. This calculation of real manipulation activity can be detailed in the mathematical models, as follows:

First, Proxy of Calculating *Abnormal Cash Flow Operational* as Equation 7. *Second*, Proxy of Calculating Abnormal Discretionary Expenses as Equation 8. *Third*, Proxy of Calculating *Abnormal Production Costs* as Equation 9. *Fourth*, Proxy of Calculating *Abnormal Components* as Equation 10 (Srivastava, 2019).

The regression for *total earnings manipulation* can be arranged as Equation 11. When the real manipulation activity quality has been higher than the mean, so this kind of company can be categorized as a non-manipulator, the lower one is judged as a real manipulator. This measurement of business topology in implementing obedience is a first proxy of business strategy.

Tax Management

This research used the *discretionary tax accruals*, based (i.e., Báez-Díaz & Alam, 2012; Choudhary et al., 2016) so that the mathematical models of calculating the tax accruals can be arranged as follows. *First*, Tax Accruals as Equation 12. *Second*, Discretionary Tax Accruals as Equation 13.

When the discretionary tax accruals quality has been higher than the mean, this kind of company can be categorized as high compliance, and the lower one is judged as low compliance. This measurement of business topology in implementing compliance is a second proxy of business strategy.

The Moderated Variable

The first moderated variable, sales growth is a measurement of comparison between previous and current periods in illustrating capability in maintaining this high survival, where Datta et al., (2013) and Sanusi et al., (2023) test the positive impact of the sales growth on earnings quality. The mathematical formula can be arranged as Equation 14. The second Control Variable with Risk (*Debt To Equity Ratio*), where Ping, (2016), Li et al., (2020), and Gorji et al., (2023) referred that the abnormal return is an indicator of judgment on the high risk, because of high discretionary accruals.

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The mathematical formula can be arranged as Equation 15.

The Control Variables

First control variable with *Size* (Total Asset), where Mangala & Isha, (2017) and Siekelova et al., (2020) stressed that high sized company has the proclivity to implement high obedience and compliance in accounting treatment and tax management, because of high involvement and monitoring mechanism. The mathematical formula can be arranged as Equation 16. Second control variable with Return On Asset (ROA); ROA is an indicator of management in achieving the expected return for the current period, which can be expressed as Equation 17 (Lei & Gu, 2016; Suresh & Pooja, 2020). For more understanding, a comprehensive illustration can be provided in Appendix II.

The Listing Formula (1)

Free Cash Flow to Equity (FCFE) = Net Income - (Capital Expenditures - Depreciation) - (Change in Non-cash Working Capital) + (New Debt Issued - Debt Repayments)…… (1)

Free Cash Flow to Equity = Net Income - (Capital Expenditures - Depreciation)(1 - δ) - (Δ Working Capital)(1- δ), where δ= Average debt ratio during the period……..….... (2)

$$Price\ Period\ t = \sum \frac{FCFE\ (t)}{(1+ke)^t} + \frac{Price\ (t)}{(1+ke)^t} \quad \text{……..……..…….(3)}$$

$$Price\ Period\ t = \sum_{t=1}^{t=n1} \frac{FCFE_{(t)}}{(1+ke)^t} + \sum_{t=1+1}^{t=n2} \frac{FCFE_{(t)}}{(1+ke)^t} + \frac{Price\ (n2)}{(1+ke)^t} \quad \text{…….(4)}$$

where the details can be seen, as follow.

ke = Cost of equity

$Price_{n2}$ = Terminal price at the end of transitional period = $FCFE_{n2+1}$ / $(r-g_n)$

$_{n1}$ = End of initial high growth period n_2 = End of transition period

g_n = Growth rate after the terminal year forever.

r = Cost of Equity

$$Future\ Value = \frac{\text{Estimated Price period t+1 – Estimated Price period t}}{\text{Estimated Price period t}} \text{.....(5)}$$

$$\text{Tracking Signal (TS)} = \frac{\text{Round Square Forecast Error}}{\text{Mean Average Deviation}} \text{.....(6)}$$

The formula of calculating the real manipulation activity can be presented as follows.

CFOt/Asset j,t-1 = α0 + α1 (1/*Asset*j,t-1) + α2 (*Sales*it/ *Asset* j,t-1] + α3 (Δ*Sales*ij/ *Asset* j,t-1) + εj,t ..... (7)

DISEXP t/*Asset* jt-1 = α0 + α1 (1/*Asset* j,t-1) + α2 (*Sales*it / *Asset* j,t-1) + εj,t .....(8)

PROD t/Asset j,t-1 = α0 + α1 (1/*Asset*j,t-1) + α2 (*Sales* j,t/ *Asset* j,t-1] + α3 (Δ*Sales* j,t/ *Asset* j,t-1) +εj,t .....(9)

Abnormal Component (j,t) = β1 + β2 *Revenue Change* (j,t)+ β3 *Revenue* (j,t) + ε (j,t) .....(10)

Note :

CFO j,t = *abnormal CFO* on firm j period t, which has been pointed out by εj,t

DISEXP j,t = *abnormal discretionary expenses* on firm j period t, which has been pointed out by εj,t.

PROD j,t = *production costs* on firm j year t, which has been pointed out by εj,t
Abnormal C omponent j,t = *earnings changes* on firm j period t, which has been pointed out by εj,t

Real Earnings Quality = [εj,t (CFOt/Asset j,t-1) + εj,t (DISEXP t/*Asset* j,t-1) - εj,t (PROD t/Asset j,t-1) + *Abnormal Component* (j,t)] x -1..... (11)

The formula of calculating the discretioanty tax accruals quality can be presented as follows.
Taxable Income j,t = Commercial Net Income j,t + Fiscal Correction j,t
Total Accruals j,t = Total Tax Accruals (TTA) j,t + Total Book Accruals (TBA) j,t
Total Tax Accruals j,t = Taxable Income j,t – Cash Flow Operational (CFO)j,t ..... (12)

Total Tax Accruals (TTA)j,t = (*absolute* εj,t) = α1+λ11 (*CFO*) j,t +λ12(*Tax Liability*) j,t+λ13 (*Sales Growth*) j,t + λ14 (*Adjusted Net Profit*) j,t + ε j,t ..... (13)

Expectation for every variable : λ 0 > 0; λ 11 > 0; λ1 2 > 0; λ12 > 0; ; λ13 > 0, where:
Adjusted Net Profit = Net Profit after Fiscal Correction on firm j period t.
Sales Growth = The growth of sales on firm j period t.
Tax Liability = The tax liability on firm j period t.
CFO = Cash Flow Operational on firm j period t
Tax Management = $\varepsilon_{j,t}$ (*absolute error value* on firm j period t) X -1.

The formula of calculating the control variables can be presented as follows.

$$Sales\ Growth \text{ period t} = \frac{Sales \text{ period t} - Sales \text{ period t}-1}{Sales \text{ period (t}-1)} \quad \text{.....(14)}$$

$$Equity\ Ratio = \frac{(Debt\ Short\ Term + Debt\ Long\ Term)}{Equity} \quad \text{.....(15)}$$

$$Size = Log\ Natural\ (\ Book\ Value\ period\ t) \quad \text{.....(16)}$$

$$Return\ On\ Asset\ (ROA) = \frac{\text{Ne Income Periode t}}{Total\ Asset\ Period\ t} \quad \text{.....(17)}$$

RESULT AND DISCUSSION

Statistical Testing

As a preliminary test, running the outlier testing with a standardized Z value has been conducted with the limit area ranging from -1.5 > Z Score > 1.5 (Gujarati, 2011). All observed data amounted to 1.457 after trimming out all data from about 179 samples based on the positive sales growth and ROA. Finally, the valid data has been 1.278 samples, this descriptive testing can be seen in Table 2.

Table 2 pointed out the existence of abnormality in the descriptive testing, where some dependent variables have a higher standard deviation than the mean, and these independent variables in both models have the same condition. There are some points represented that *first*, the non-manipulator has a higher mean and lower standard deviation than the other one; this illustrates this total concentration of high obedience in non-manipulators. *Second*, a high-compliance company has a higher mean and lower standard deviation compared to the other one; this illustrates this full awareness of high compliance in a high-compliance company.

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Table 2. The Descriptive Testing

No	Description	N	Minimum	Maximum	Mean	Std. Dev.
	Dependent Variables					
1	Real Manipulation Activity Quality	1.278	-2.839	3.764	0.815	2.480
2	Discretionary Tax Accruals Quality	1.278	-1.144	1.356	0.634	0.859
3	Total Asset (in thousand)	1.278	372,871	2,953.612	974,251	871,572
4	The Growth of Sales (in %)	1.278	0.175	1.093	0.627	0.514
5	The Risk (beta)	1.278	0.000	0.851	0.681	0.439
6	Return On Asset (ROA)	1.278	0.015	1.147	0.347	0.174
	Independent Variables					
7	Two Stages: Future Value	1.278	0.025	0.681	0.372	0.619
8	Three Stages: Future Value	1.278	0.107	0.759	0.461	0.738
	Dummy Variabel					
9	Non Manipulator	703	1.841	3.764	0.932	1.837
10	Real Manipulator	575	-2.839	2.793	0.281	2.976
11	High Compliance	697	0.974	1.356	1.083	0.495
12	Low Compliance	581	-1.144	0.859	0.374	1.591

Note: Std. dev.= Standard Deviation
Source: Secondary Data

The descriptive testing pointed out that the high prospected is indicated by non-manipulator and high compliance companies, which is a proper guideline in distinguishing the better one. This result proves that a positive perception of zero tolerance for misleading information stimulates the smooth fluctuation of agency costs as a consequence of any violation. Theoretically, the research uses a large population (n > 30); this one refers to the Teorema Central Point, where a mathematical formula can be illustrated as Equation 18.

This testing result of highly dispersed data had strengthened (Lebert, 2019) when the research proved the various patterns of opportunistic motive when Martínez-Ferrero et al., (2016) and Nguyen et al.,(2022) found this motive is to hidden opportunistic behavior because the dynamic obstacles are to detect this one with releasing the meaningless disclosure. This identical result has been strengthened by Dichev et al., (2016); there is a concrete handicap for capturing the real earnings in monitoring the current performance (Arora & Chauhan, 2021; Ason et al., 2021), particularly difficulty in distinguishing the real one approximately. Concerning the unique condition of earning quality research, Perotti & Wagenhofer, (2014) underlined the high variation of distorted information, which cannot fulfill the minimum criteria of classic assumption testing. Alternatively, this data panel is the most efficient econometric model to combine the cross-section and time-series data (Hair et al., 2010); therefore, the data panel can be used as advanced testing for all regression models. Suresh & Pooja, (2020) linking to this testing is the fittest model of anticipating this abnormality, this research provides the summary in Table 3.

Table 4 implies that F calculated > F Tabel has been a highly significant predictive model, in which these independent partially affect the dependent variables; it can be interpreted that in the first model, the testing of the Real Manipulation Activity Quality has a Sig level of 0.041 < of the error value of 0.05 and a positive coefficient of 0.071. In the second model, this testing has a Sig level of 0.045 < of the error value of 0.05 and a positive coefficient of 0.051. Therefore, the H1 hypothesis is accepted.

In the first model, the testing first moderation has a Sig level of 0.087 < of the error value of 0.05 and a positive coefficient of 0.146. In the second model, this moderation testing has a Sig level of 0.042 < of the error value of 0.05 and a positive coefficient of 0.091. Then, hypothesis H1a is accepted, and this moderated variable is a quasi-moderator.

In the first model, testing of the second moderation has a Sig level of 0.028 < of the error value of 0.05 and a positive coefficient of 0.119. In the second model, this moderation testing has a Sig level of 0.037 < of the error value of 0.05 and a negative coefficient of 0.183; Then, hypothesis H1b is accepted, and this moderated variable is a quasi-moderator.

In the first model, testing of the Discretionary Variable Tax Accruals Quality has a Sig level of 0.041 < of the error value of 0.05 and a positive coefficient of 0.094. In the second model, this testing has a Sig level of 0.045 < of the error value of 0.05 and a positive coefficient of 0.046. Therefore, the H1 hypothesis is accepted.

In the first model, the testing first moderation has a Sig level of 0.026 < of the error value of 0.05 and a positive coefficient of 0.101. In the second model, this moderation testing has a Sig level of 0.029 < of the error value of 0.05 and a positive coefficient of 0.084; Then, hypothesis H2a is accepted, where this moderated variable is a quasi-moderator.

In the second model, the testing second moderation has a Sig level of 0.072> of the error value of 0.05 and a negative coefficient of 0.092. In the second model, this moderation testing has a Sig level of 0.091 > of the error value of 0.05 and a negative coefficient of 0.057; Then, hypothesis H2b is rejected.

This endogeneity testing pointed out that Cragg-Donald F-statistic is more than ten as a minimum threshold value in a meeting of 10 as a minimum requirement. In running the Hansen J-statistic (over-identified test), this insignificant statistics testing reflected that the existing exogenous variables have validity and relevance (Hill et al., 2021). Explicitly, this endogeneity is present in the models, so the 2SLS estimation should be used to minimize biased error (Eckert & Hohberger, 2022). Therefore, the testing of endogeneity can be presented as Table 5.

Table 5 signifies that this testing of the data panel has different results; the first model with two stages has the random effect model, and the second with three stages has the fixed effect, where both models have not run some classic assumption testing. The estimation of real manipulation activity quality has the unique characteristics of a high-complexity model, Lebert, (2019) underlined the various high patterns of quality measurement; Khuong et al., (2022) linked to the testing of quality measurement has highly dispersed data distribution, this same result has been supported Alipour et al., (2019), Mirza & Campus, (2022), and Wang et al., (2023), in which these models have some Constanta as a meaningless indicator. Statistically, the results of testing can be detailed as Table 5.

Table 6 points out that the robust check has been proven in the acceptance tolerance zone as a high fittest level and

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validity; the positive impact of high earnings quality on the positive movement of market price has been strengthened by the sales growth, affirmative point of carrying out the high obedience in publishing high-quality accounting information. The risk could not moderate the link between tax management and future return; tax management has no positive contribution to the deduction of the risk; therefore, this regression model can be presented as Equation 19 and Equation 20.

These contributions of control variables can be detailed that the positive influence of Total Assets, Sales Growth, and ROA is "good news" for a high probability of high business existence as a sign of sustainability in the future. The negative influence of Risk is a "good sign" for the low probability of uncertainty and unpredictability of future return

These contributions of dummy variables can be detailed that the non-manipulator has a positive coefficient regression, and the other one has a negative one; this illustrates that this highly prospected company has a positive return because of high certainty.

A high-compliance company has a positive coefficient regression, and the other one has a negative one; this illustrates that this highly prospected company has a positive return because of a high probability of tax exposure.

Theoretical Implication

This research has proven the pattern of the rational decision model, which Askari et al., (2019) underlined the behavior in obtaining maximum utility to illustrate no loss for each party. Jacob & Schütt, (2019) focused on this relationship between high certainty and positive expected return, and Delgado et al., (2023) stressed the awareness of high obedience and compliance; this result depicted the impact of earnings quality as a measurement of trust in keeping the going concerned, so Wang et al., (2023), Thenceforth, the mapping can be arranged, as Figure 3.

Figure 3 pointed out the mechanism of maximum utility based on the other party's perception. When the high earnings quality indicates obtaining good news of high business sustainability and flexible financing, it can follow up the optimism of grabbing better prospects as a crucial factor of high obedience and compliance. Such as a strategic decision to illustrate a sign of low risk when Datta et al., (2013), and Lei & Gu, (2016) found the capability of a high probability of better sustainability of business existence is a diagnostic sign for a sign of high obedience, where the indicated by high growth sales and risk in financing the expansion activity. Agustia et al., (2020) and Sanusi et al., (2023) underlined that this financial distress is a contextual environment of low earnings quality because of the high probability of bankruptcy, illustrating a failure to keep on the business sustainability. The capability to detect the investor decision, Chen & Wu, (2021) refers to the action of short selling on low earnings quality. As a new insight into the literature on earnings management and tax, this research developed the mechanism of market price movement, which is based on Kaplan, (1996), Franklin & Morris, (2002), and Hutton & Stocken, (2021) as some references of building a 'smart' portfolio. The mapping of interactive feedback between both parties can be described that a "positive market value" is "good news" as proof of efficient contracting. The formula for estimating this probability can be seen in Equation 21. A "negative market value" is "bad news" as proof of opportunity motive. The formula for estimating the probability of this can be seen in Equation 22.

The mapping between real manipulation and expected return illustrated two conditions. *First*, when the company has

been in positive market value, obedience to accounting standards has supported the positive movement of market price as an indicator of high certainty and optimism of higher growth. *Second*, when the company has been in negative market value, the low-prospect company has levelled down the investor perception. Low accruals quality is used as a communication channel because of high uncertainty and pessimistic of higher growth.

In the gist, the earnings quality has been an indicator to change a sign for "positive market value" much more extensively than pressure for "negative market value," including a communication process of changing perception from *"bad news "* to "*good news*". This proof contributes to high obedience as an accurate indicator of high certainty in predicting the future return; this testing proves the interactive feedback in positively anticipating the high-low quality accounting information, which has been used to protect this fundamental role of investor's requirement from gaining this actual performance as an efficient contracting.

Practical Implication

After illustrating a mapping of the investor perception and management decision, this comprehensive solution in exploring a phenomenon of the rational decision model, this research modified the innovative portfolio in grabbing the maximum utility by using the max-min decision model. It refers to this pattern of linearity as a proof of prospect theory, so the linear programming with the "simplex model" has been used as a mathematic model in calculating the maximum utility, which is based on Trippi & Lee, (1996) with a modified innovative portfolio in calculating the maximum result and minimum cost.

First Model: Innovative Portfolio for Management

This innovative portfolio used the maximum model in estimating value with no violation of all regulations legally; this maximum value is aimed at estimating the high probability of positive firm value depending on high-low levelled infringement on accounting standards. This real composition of policy has been proposed in the portfolio model with concern about some constraints; low obedience to accounting standards has reduced the trust in the future constructively as self-confidence of the minimum misleading information. The mathematical formula for calculating the maximum firm can be formed as Equation 23.

Second Model: Innovative Portfolio for Investor

This model helps the investor to form an innovative portfolio, where this variable in the constraint function with taking attention to the investor's capability of monitoring four portfolios, and the mathematical formula for obtaining the maximum return can be formed systematically as Equation 24.

For creating a smart portfolio in investment, where an assumption of forming an identity matrix is needed in calculating max return and min cost; the mathematics model in the constraint function can be formulated systematically, as Equation 25, Equation 26, and Equation 27.

Finally, this maximum model in a portfolio as a comprehensive guideline is used to intercept the peach-lemon effect when tax management can contribute positively to deducting the risk, including the incapability of fulfilling the moderation role between risk and future return. This illustration depicts how investors react to high earnings quality as a signal of high obedience. The max-min model illustrates the impact of meaningful accounting

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information on market reaction. This indicator of measurement of trust in driving up the business sustainability is investor's attention on high integrity and responsibility to carry out all available regulations legally. This widely opened chance for opportunistic accruals is a handicap in illustrating earnings persistence, referring to the gap between tax-book accruals.

The Listing Formula (2)

The Teorema Central Point can be presented as follow**.**

$$\lim_{n\to\infty} P(Z \leq \pi) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{x} e^{-\frac{y2}{2}dy} \quad \text{.....(18)}$$

First Model Regression, where:

Future Value = 0.071 + 0.185 RMAQ + 0.239 (RMAQ x Growth) - 0.197 (RMAQ x Risk) + 0.186 DTAQ - 0.027 (DTAQ x Growth) + 0.179 Assets + 0.391 Growth - 0.306 Risk + 0.205 ROA……....(19)

Second Model Regression, where:

Future Value = 0.086 + 0.084 RMAQ + 0.193 (RMAQ x Growth) - 0.102 (RMAQ x Risk) + 0.091 DTAQ - 0.012 (DTAQ x Growth) + 0.126 Assets + 0.304 Growth - 0.227 Risk + 0.183 ROA ..... (20)

The probability of A Positive Market Value can be calculated as follows:

$$P(RMAQ, Hi|\text{Gro, Hi}) = \frac{P(\text{Gro, Hi}|\ RMAQ, Hi) \text{ x } P(\text{Gro, Hi})}{P(\text{Gro, Hi}|\ RMAQ, Hi) \text{ x } P(\text{Gro,Hi}) + P(\text{Gro,Hi}|RMAQ, Lo) \text{ x } P(RMAQ, \text{Lo})} \quad \text{.....(21)}$$

The probability of A Negative Market Value can be calculated as follows:

$$P(RMAQ,Hi|\text{Gro,Lo}) = \frac{P(\text{Gro, Lo}|\ RMAQ, Hi) \text{ x } P(\text{Gro, Lo})}{P(\text{Gro, Lo}|\ RMAQ, Hi) \text{ x } P(\text{Gro, Lo}) + P(\text{Gro,Lo}|\ RMAQ, Lo) \text{ x } P(RMAQ, \text{Lo})} \quad \text{….(22)}$$

Description :

P(Gro, Hi) is the probability of a firm in high sales growth.

P(Gro, Lo) is the probability of a firm with low sales growth.

P(*RMAQ*, Hi) is the probability of high earnings quality when real manipulation activity quality has been estimated in a high sales growth.

P(*RMAQ*, Lo) is the probability of low earnings quality when real manipulation activity quality has been estimated in low sales growth.

P(Gro, Hi|*RMAQ, Hi*) is the probability of high sales growth when real manipulation activity quality has been implemented with a high maximum.

P(Gro, Hi|*RMAQ, Lo*) is the probability of high sales growth when real manipulation activity quality has been implemented with a low maximum.

P(*RMAQ, Hi*|Gro, Hi) is the probability of real manipulation activity quality has been implemented with a high maximum when the sales growth is at a high level

P(Gro, Lo|*RMAQ, Hi*) is the probability of high sales growth when real manipulation activity quality has been implemented with a high maximum.

P(Gro, Lo |*RMAQ, Lo*) is the probability of high sales growth when real manipulation activity quality has been implemented with a low maximum.

P(*RMAQ, Hi*|Gro, Lo) is the probability of real manipulation activity quality has been implemented with a high maximum when the sales growth is at a low level.

The first simplex-linear programming model can be presented as follows.

Maximum Firm Value Model : $Z = D_1 X_1 + D_2 X_2 + D_3 X_3$ .....(23)
where:

X1 is a composition of real manipulation activity quality

X2 is a composition of accruals quality

X3 is a composition of tax management

Note:$D_{1,2,3,4}$ is the composite of this maximum Z (positive value for firm value) with an indicatoro of efficient contracting, which refers to being 100 % optimistic with no pessimistic.

The second simplex-linear programming model can be presented as follows.

Maximum Return Model : $Z = D_1 X_1 + D_2 X_2 + D_3 X_3$..... (24)
where : $X_{1,2,3}$ is an investment proportion in the first, second and third company

The constraint variables can be proposed as follows.

Compliance = $\mu_1 X_1 + \mu_2 X_2 + \mu_3 X_3 + \mu_4 X_4$ (</>*) Average Discretionary Tax Accruals Quality as a target indicator .....(25)
Sales Growth = $\delta_1 X_1 + \delta_2 X_2 + \delta_3 X_3 + \delta_4 X_4$ (</>*) Average Sales Growth as a target indicator .....(26)
Obedience = $\varsigma_1 X_1 + \varsigma_2 X_2 + \varsigma_3 X_3 + \varsigma_4 X_4$ (</>*) Average Real Manipulation Activity Quality as a target indicator..... (27)

Note : (*) = The sign of ">" and "<" depends on the Max and Min model, where "<" is for the max model and ">" is for the min model.

The Statistical Testing Tabel

Table 3. The Summary of Data Panel Testing

The Phase-in Testing Model	**Future Value First Model: Two Stages**	**Future Value Second Model: Three Stages**
Chow Testing	p value=0.073 (>0,05) H_0 Accepted Common Effect Model	p value=0.081 (>0,05) H_0 Rejected Fixed Effect Model
Hausman Testing	Not Done	p value=0.025 (<0.05) H_0 Rejected Fixed Effect Model
Lagrange MultiplierTesting	Prob. Breusch-Pagan=0.064 (>0.05) H_0 Rejected Random Effect Model	Not Done

Source: Secondary Data, compiled from file output Eviews

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Table 4. Coefficient Values through Real Manipulation Activity Quality Testing.

Basis of Measurement with Independent Variables	***Future Value: Two Stages***			***Future Value: Three Stages***		
	Coefficient	**H**	**Sig(*)**	**Coefficient**	**H**	**Sig(*)**
1. Variables Constanta	0.851		0.813	0.924		0.369
Dependent Variable						
2. *Real Manipulation Activity Quality* (RMAQ)	0.071	Accepted	0.041	0.051	Accepted	0.045
3. RMAQ X Growth	0.146	Accepted	0.037	0.107	Accepted	0.042
4. RMAQ X Risk	-0.091	Accepted	0.028	-0.083	Accepted	0.037
5. *Discretionary Tax Accruals Quality* (DTAQ)	0.094	Accepted	0.037	0.046	Accepted	0.034
6. DTAQ X Growth	0.101	Accepted	0.026	0.084	Accepted	0.029
7. DTAQ X Risk	-0.098	Rejected	0.072	-0.057	Rejected	0.091
Control Variable						
8. Log *Total Asset* (Asset)	0.103	Significant	0.024	0.096	Significant	0.019
9. Sales Growth (Growth)	0.312	Significant	0.023	0.235	Significant	0.038
10. Risk	-0.225	Significant	0.018	-0.181	Significant	0.022
11. Return On Asset (ROA)	0.102	Significant	0.021	0.064	Significant	0.025
Dummy Variabel						
12. Real Manipulator	-0.137	Significant	0.042	-0.092	Significant	0.041
13. Non-Manipulator	0.249	Significant	0.035	0.117	Significant	0.032
14. High Compliance	0.171	Significant	0.032	0.142	Significant	0.031
15. Low Compliance	-0.086	Significant	0.045	-0.035	Significant	0.043
a. Anova F test	7.571 (> F, 0.341)			5.587 (> F, 0.341)		
b. Sig	0.000 (< 0.05)			0.000 (< 0.05)		
c. Adjusted R Square	0.143			0.127		
d. R Square	0.189			0.171		
e. Durbin Watson	1.935 (1.845 < X <2.154)			2.012(1.845 < X <2.154)		

Source: Analysing Secondary Data
Sig (*)=Sig One Tail F.INV(5%,8,1278)=0.341
T.DIST(5%,1278,TRUE)=0.519

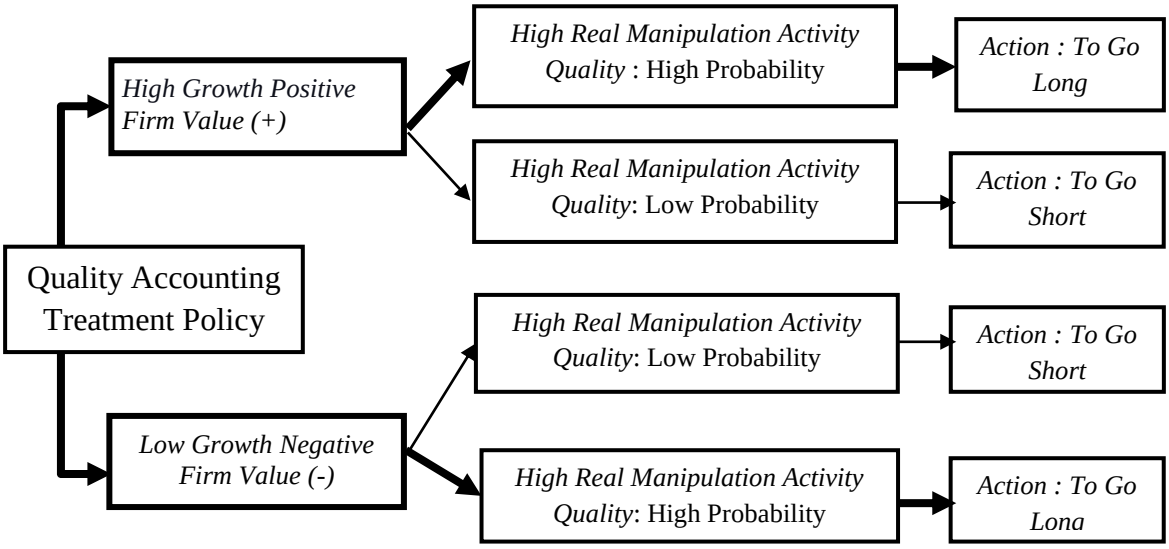
Table 5. Regression Testing in Measuring This Impact of Endogeneity

The Multiple Regression using 2SLS with t-white	**Future Value: Two Stages**		**Future Value: Three Stages**	
Description	Coefficient	t testing	Coefficient	t testing
Variables Constanta	0.071	1,784 *	0.086	2.531 *
Dependent Variable				
1. *Real Manipulation Activity Quality*	0.185	3.871***	0.084	3.742***
2. RMAQ X Growth	0.239	2.479***	0.193	2.127***
3. RMAQ X Risk	-0.197	1.873***	-0.102	1.641***
4. *Discretionary Tax Accruals Quality*	0.186	4.584**	0.091	3.847**
5. DTAQ X Growth	-0.027	1.442*	-0.012	1.017*
Control Variable				
6. Log Total Asset (Asset)	0.179	3.536***	0.126	3.031***
7. Sales Growth (Growth)	0.391	5.241***	0.304	5.108***
8. Risk	-0.306	-4.495***	-0.227	-3.831***
9. Return On Asset (ROA)	0.205	3.491***	0.183	3.283***
Dummy Variabel				
10. Real Manipulator	-0.159	3.463**	-0.117	4.472**
11. Non-Manipulator	0.284	5.852**	0.152	5.529**
12. High Compliance	0.207	5.158*	0.179	4.748*
13. Low Compliance	-0.109	2.376*	-0.085	2.165*
Testing on the Endogeneity Model				
J-Statistic	0.018		0.008	
Prob (J-Statistic)	0.847		0.621	
Cragg-Donald F-Stat	18.491 when $\rho < 0,01$		17.314 when $\rho < 0,01$	
Regressor Endogeneity Prob.	0.028 when $\rho < 0,05$		0.021 when $\rho < 0,05$	

Note : Calculated by Eview 10
*** $\rho < 0,01$ * $\rho < 0,10$ ** $\rho < 0,05$
RMAQ = *Real Manipulation Activity Quality* DTAQ = *Discretionary Tax Accruals Quality*

The Illustration

The Decision Tree Model can be illustrated as follows.



Note: Compiled from Researchers

Figure 3. The Mapping between Tax Management and Market Value

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CONCLUSION

The previous research has proven empirically that the capital market positively contributes to full employment as an indicator of economics macro. The need to distinguish the better prospect, a definition of earning quality, is a proxy of high obedience and compliance; the real earnings are used to maintain the investment fund in a secure safe area where the valid information contains no distortion. The high probability of high return is at the highly prospected company compared to the other, as concrete attention to high certainty pushes the management to publish high-quality accounting information. This result can be concluded; firstly, testing on real manipulation activity quality positively contributes to future values, including the moderation testing with sales growth and risk. High compliance plays a critical role in predicting the prospect where this advantage is to grab flexible financing as an indicator of low risk. Tax management positively impacts future value, which pointed out that high compliance plays a critical role in predicting prospects. When sales growth and risk are used in moderation testing, this growth as a sign of sustainability has signposted that proper tax management has positively contributed to predicting the going concerned; meanwhile, the risk could not support this relationship. This result has proven that optimism has a positive guideline for the investor in distinguishing the better one, which is a concise guideline of high-quality accounting information related to narrow tolerance limited areas of the accepted gap between principle-based standards and self-assessment tax model and high capability in keeping the business existence in the future. This testing of risk has proven that the investor has much more attention on the sales growth compared to the risk; it is related to high awareness of high business survival.

Secondly, this result has proven that interactive feedback as a response to quality accounting information, where awareness of zero violation is a 'good sign' of monitoring the competence in expanding the business activity; the pattern of maximizing utility can be interpreted that the existence of game theory is used directed to the rational decision model. This model can be captured by proposing an innovative portfolio, which is used as protective information by intercepting misleading information. In this research, some analysing tools have supported this decision model based on the linearity approach; this maximum simplex programming as a predictive simulation is used in calculating the high probability of the other party's action as a sign of a better prospect. The rational decision model has been depicted by developing a game theory model; the management and investor can calculate the trade-off between the benefit and loss of composing the policy. The awareness of opportunistic accruals is a full consideration for keeping the investment in a highly secured and safe area as a mutually exclusive relationship. As an illustration of this decision model, this

Recommendation

There are some recommendations for academic and practical implications. The link between accounting information and strategic management has been new literature on the rational decision model, which cannot obtain an abnormal return. The concept of high-quality accounting information in the industry sector has the strategic advantage of leveling up the efficiency and utilization as the potential market; in reality, the positive contribution of future return at the highly prospected company depicted a significant attractiveness in maintaining a high business existence. This capital market is determined for high-prospect companies, where the regulator's responsibility is to keep the community's trust in fulfilling the expected return. New entrants should be assured of making a better prospect; the essential requirement of high-quality financial

reporting is used to level up the management's prudence so that implementing a go-private procedure is a wise exit procedure for the investor in intercepting suffering so much loss in the future. This contribution is to underline the usefulness of accounting information as proof of the rational decision model, and the regulator should design one platform for reporting services and adjust the different viewpoints of tax-book accruals, where is to minimize the chance of opportunistic accruals, pragmatically related to the trust in the going concerned.

Future Research

This research has some limitations in analyzing the impact of accounting information, and lasso regression could be used to test earnings quality's impact on the investor's action with high accuracy as the "representative" approach for future research. Alternatively, dynamic data panel testing is the other approach for running data panel testing, where the measurement of residual error has a high variation of opportunity behavior. This dynamic model of testing data panel is a recommendation for future research in testing endogeneity to obtain a higher validity and accuracy level. This model aims to be robust from endogeneity; then, uniqueness is to have the fittest model in predicting the forecasting process and the high persistence in highly random data. The measuring of Free Cash Flow to Equity in calculating the predicted price is a simple model for calculating the cost of capital; the following research can conduct the development by expanding the observation period related to separating the three stages in H model multi-growth stages with the balanced composition. For beta measurement, the Arbitrage Pricing Model can be developed into the "better" model for substituting Security Market Line to calculate the growth and return rate. Future research needs a more comprehensive approach to capturing the investors' perceptions about the uncertainty of the link between risk and return, in which risk measurement should be more "good" and "easy and simple to understand" indicators.

Appendix 1

Table 6. Comparison Growth of Manufacturing Companies

Industry Sector	Total Companies 2021	Total Companies 2010	Growth (%)
Automobile and Spare Parts Manufacturing	14	12	16.67%
Cement and Construction Processing	8	4	100.00%
Ceramic, Porcelain, and Glass Processing	7	6	16.67%
Chemical Manufacturing	19	10	90.00%
Cosmetic and Beautiful Appliances	7	3	133.33%
Electrical Equipment Manufacturing	4	1	300.00%
Food and Beverages Manufacturing	39	14	178.57%
General Equipment Manufacturing	4	2	100.00%
Home Appliances	7	3	133.33%
Metal and Material Processing Products	17	15	13.33%
Paper and Products Processing	9	7	28.57%
Pharmaceutical Manufacturing	11	9	22.22%
Plastic and Toy Products	14	11	27.27%
Poultry Manufacturing	5	5	0.00%
Shoes and Other Appliances	2	3	-33.33%
Special Equipment Manufacturing	21	7	200.00%
Textile and Clothing, Apparel Industry	22	16	37.50%
Wood Products Processing	4	2	100.00%
Total	214	130	81.34%

Source: Data were compiled from the website of the Indonesia Stock Exchange, 2021(IDX, 2021)

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Appendix II

Table 7. Measurements of Operating Variables

Variable	Formula Measurement	Scale
Dependent Variable: Future Value	Delta Price = Estimated Price period t+1 – Estimated Price period t Future Value $_t$ =Delta Price / Estimated Price Periode t where the estimated price t + 1 is based on the H model in Table 1.	Ratio
Independent Variable with Real Manipulation Activity Quality	*Real Earnings Manipulation Quality* = [εj,t (CFOt/Asset j,t-1) + εj,t (DISEXP t/*Asset* j,t-1) - ..... εj,t (PROD t	Ratio
Independent Variable with Tax Management as Quality measurement = (absolute Predictive Value j, t.) X -1	Total Tax Accruals j,t = Taxable Income j,t – CFO j,t *Total Tax Accruals* (TTA)j,t = (*absolute* εj,t) = α1 + λ11 (*CFO*) j,t + λ12 (*Tax Liability*) j,t + λ13 (*Sales Growth*) j,t + λ14 (*Adjusted Net Profit*) j,t + ε j,t.....	Ratio
First Moderation Variable: Sales Growth	Delta Sales = Sales period t − Sales period t-1 Sales Growth $_t$ =Delta Sales / Sales $_{(t)}$	Ratio
Second Control Variable with Risk using the measurement of Debt To Equity Ratio	Total Debt = Short-term Debt + Long-term Debt Then the formula was developed Debt to Equity Ratio = Total Debt Value / Equity Value	Ratio
First Control Variable: Size using Total Asset	Book Value = Value Total Asset current period Size = LN (Book Value)	Ratio
Second Control Variable: with Return On Assets (ROA)	ROA = Net Income Period t / Total Asset Period t	Ratio

Source: To be complied with by the authors

Appendix III

Table 8. Illustration of Sampling during 2010–2021

Industry Sector	Total Companies	Failed Obsr.	Total Obsr.	Valid Obsr.
Automobile and Spare Parts Manufacturing	14		154	124
Cement and Construction Processing	8		88	66
Ceramic, Porcelain, and Glass Processing	7		55	41
Chemical Manufacturing	19	15	209	169
Cosmetic and Beautiful Appliances	7		77	58
Electrical Equipment Manufacturing	4		44	34
Food and Beverages Manufacturing	39		121	93
General Equipment Manufacturing	4	36	110	83
Home Appliances	7		77	58
Metal and Material Processing Products	17	24	132	98
Paper and Products Processing	9		77	58
Pharmaceutical Manufacturing	11		121	103
Plastic and Toy Products	14	4	88	66
Poultry Manufacturing	5		55	41
Shoes and Other Appliances	2		22	17
Special Equipment Manufacturing	21	6	44	34
Textile and Clothing, Apparel Industry	22	27	198	118
Wood Products Processing	4		22	17
Total	214	112	1,694	1,278

Source: Data were compiled from the website of the Indonesia Stock Exchange, 2021(IDX, 2021)

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Appendix IV

Table 9. The Listing of Previous Research

No	Previous Study	Operational Variable	Result	Note
1	Nguyen et al.,(2022)	Discretionary Accruals, Total Asset, Real Manipulation Activity	Opportunity motives have been detected significantly by discretionary accruals and manipulation activity.	Srivastava model has been robust when compared to Rowchowyduri.
2	Efendi et al.,(2023)	Accruals, Real Activity Earnings, and Short Selling	The link between accounting information and investment decisions has been proven as an indicator of Ethic Perspective.	Earnings Management has an ethical challenge, because of confidence in future performance
3	El Diri et al.,(2020)	Concentrated industry, real earnings management, and corporate governance	The impact of market structure has been tested on better prospects.	The low-concentrated industry has been a preference, where low probability of opportunity accruals.
4	Herusetya et al., (2023)	Accrual Earnings Management, Real Activities Manipulation, Business Strategy	The opportunistic has been used to detect the business model, both defenders, and prospectors	The high-prospected firm has a low probability of implementing negative earnings management.
5	Deb, (2019)	Pedagogy, Accounting Theory, and Research, including practice and treatment	The relevance of accounting theories has been proven as a common business language.	There is an existing handicap to interpreting this number, because of the complex model and many jargons.
6	Mensah & Boachie, (2023)	Gender Diversity, Corporate Governance Mechanisms, and Earnings Management	The positive perception of earnings management is used to illustrate optimism about future performance	The composite board of directors is a crucial factor to deduct earnings management as “good news”
7	Ma & Yoo, (2022)	Earnings Persistence, Total Asset, Operating Cash Flow, and Business Scale	The relationship between earnings management and sustainable business model has been tested statistically.	Sustainable management activities ultimately have a positive effect on corporate financial performance and corporate value.
8	Elhaj et al., (2022)	Real Earnings Management, Risk, Board Size, Firm Size, Audit Quality, Leverage, and ROA	The high earnings quality has been proven as an indicator of low risk	Risk management has a significant negative effect on Real Earnings Management.

Table 9. Continue

No	Previous Study	Operational Variable	Result	Note
9	Lee, (2016)	Book–Tax Accruals and Book-Only Accruals, The Tax Avoidance Proxy	The tax avoidance proxy detects the management of book-tax and book-only accruals.	Tax management can be a good indicator and aggressive tax shelters are restricted.
10	Kałdoński & Jewartowski, (2020)	Real Earnings Manipulation, Tax Conformity	Tax management is a quality measurement, a similar treatment of earnings quality.	The aggressive tax accruals are even more costly than is widely considered as low compliance.
11	Osegbue et al., (2018)	Earnings Quality, Tax Saving, Taxable Income, Tax Expense, Deferred Tax Dividend Expenses	The significant effects of the book-tax gap show that an increase or decrease in the book-tax gap is a signal of high or low earnings quality.	Tax aggressiveness affects the quality of the firm's earnings.
12	Wang et al., (2023)	Market Price, Earnings Quality, Cash Flow, Trading Value, Assets, Liabilities, and Market Book Value	The quality of information is manipulated by selective insider disclosure, rendering falsifications in earning management and increasing the stock price crash risk.	Information quality is negatively related to earnings management; the higher the disclosure quality illustrates, the lower risk of a stock price crash.
13	Ntokozi et al., (2022)	Total Accruals, Audit Quality, Assets, Cash Flow, Leverage, and Price To Book	Firms' accounting policy decisions affect firms' propensity to engage in earnings management within a context of financial distress.	Discretionary accruals positively correlate with a firm's sustainability while negatively associated with firm value.
14	Báez-Díaz & Alam, (2012)	Total Tax Accruals, and Total Book Accruals: Cash Flow, Earnings, Assets, Liabilities, and Tax Payable	Tax accruals are mispriced more than book accruals because of the complexity of tax accruals in assessing future earnings.	Income-increasing book accruals contribute to the growing divergence between tax and book earnings.
15	Lennox et al., (2013)	Fraud and Tax Aggressiveness: Company Size and Age, Audit tenure, Negative Assets, Debt Equity, and merger and Acquisition	Tax-aggressive is less likely to commit accounting fraud, referring to the association between aggressive tax reporting and the incidence of alleged accounting fraud.	Tax-aggressive firms are less apt to manipulate their financial statements when we identify tax avoidance fraudulently.

Note: The previous research was based on the sequences of hypotheses

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