

When do investors price accrual information? Revisiting the accrual anomaly in Indonesia and Singapore

Yanuar Dananjaya^{1*}, Henry Soedarko², Deddy Marciano³

¹*Faculty of Economics and Business, Universitas Pelita Harapan, Indonesia*

²*Milltrust International, Singapore*

³*Department of Management, Faculty of Business & Economics, Universitas Surabaya, Indonesia*

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Abstract

Traditional accrual anomaly research posits that investors often overlook the accrual component of earnings, leading to a negative correlation between current-period accruals and future stock returns. However, recent studies suggest this relationship has diminished. This research investigates whether total accruals correlate more with current-period stock returns than with those one year ahead, and whether this relationship varies between Indonesia and Singapore. We analyze panel data from Industrial Goods manufacturing firms listed in these countries from 2015 to 2024, using fixed-effects regression with a country interaction term and relevant control variables. Our findings reveal that total accruals do not significantly impact one-year-ahead stock returns but are significantly and negatively linked to current-period stock returns. The interaction between accruals and country is not significant, indicating no statistical difference in accrual pricing between the two markets. These results are consistent across both halves of the sample period, suggesting that accrual information may be integrated into stock prices sooner than the traditional accrual anomaly framework predicts.

Keywords: *accrual anomaly, total accruals, stock returns, market efficiency*

Introduction

Financial statements is an important source of information for stock investors making investment decisions. Among various data inside financial statements, earning is an important role in valuation models because it shows a firm's current economic performance. However, earnings are consisted of both cash flow and accrual components, which differ in their persistence and informational content (Sloan, 1996). While the cash flow component is explicitly visible on the Statement of Cash Flows, total accruals are not reported as a standalone line item (Sloan, 1996). Instead, extracting accruals requires investors to manually calculate the difference between net income and operating cash flows.

Because accrual accounting involves subjective managerial estimates, the accrual component in earnings are less persistent and less likely to recur in subsequent periods compared to the cash flow component (Sloan, 1996; Xie, 2001). Earnings with a high proportion of accruals are therefore considered to be of lower quality (Chan et al., 2006). Despite this fundamental divergence, average investors often suffer from limited attention and functional fixation, treating earnings from accruals identically to those of realized cash flows (Sloan, 1996). The result is that firms with high accruals subsequently earn lower stock returns than firms with low accruals. This phenomenon, known as the accrual anomaly, indicates that the market systematically fails to realize the lower persistence of the accrual component in earnings (Sloan, 1996).

The phenomenon has largely vanished from the United States market since approximately the year 2000, primarily due to arbitrage activities by institutional investors (Dechow et al., 2011; Collins et al., 2003). The returns associated with Sloan's original anomaly have diminished in U.S. stock markets to the extent that they are no longer positive. Notably, beginning in 2004, both raw and risk-adjusted annual hedge returns for the accruals strategy ceased to be profitable, indicating the apparent end of the anomaly. This disappearance is mainly attributed to a substantial influx of capital from quantitative hedge funds aiming to exploit the opportunity, which, coupled with a reduction in the magnitude of the mispricing signal itself, effectively eliminated the anomaly through arbitrage (Greene et al., 2009).

The dominant explanation for this phenomenon is that investors have become more sophisticated and that arbitrage activities have progressively eliminated the mispricing of accruals (Choy, Lobo, and Tan, 2022; Dechow et al., 2011; Greene et al., 2009; Hirshleifer, Teoh, & Yu, 2012; Richardson, Tuna, & Wysocki, 2010; Wu, Zhang, & Zhang, 2010). Nevertheless, this interpretation may not be the sole plausible explanation. An alternative hypothesis suggests that the change of timing of accrual pricing rather than the anomaly itself disappearing. In contrast to the period examined in earlier studies, contemporary investors have access to more timely financial information through quarterly financial reports, corporate disclosures, financial data platforms, and advanced analytical tools. Consequently, investors may process accrual-related information continuously throughout the fiscal year, rather than waiting for the annual financial statements. If this is the case, the market may integrate accrual information into stock prices within the same fiscal period, thereby diminishing or eliminating the predictive power for subsequent annual stock returns. Despite its intuitive appeal, this alternative explanation has received limited empirical attention in the existing literature.

Accordingly, this study revisits the accrual anomaly by examining whether total accruals are associated with current-period rather than one-year-ahead stock returns and whether this relationship differs between Indonesia and Singapore. Using a panel dataset of Industrial Goods firms listed on the Indonesia Stock Exchange (IDX) and the Singapore Exchange (SGX) during 2015–2024, the study makes three contributions. First, it distinguishes between delayed and current-period accrual pricing by examining total accruals against both one-year-ahead and current-period stock returns. Second, it provides cross-market evidence by comparing accrual pricing between Indonesia and Singapore, two markets that differ in market development and institutional characteristics. Third, it combines panel regression with country interaction terms and a series of robustness tests to assess the stability of the observed pricing relationship and strengthen the interpretation regarding the timing of accrual pricing. By focusing on when accrual information is reflected in stock returns, rather than only whether accruals predict future returns, this study contributes to the literature on the accrual anomaly and the speed of information incorporation into stock prices.

Sloan (1996) defines the accrual anomaly as the phenomenon where investors systematically fail to recognize the lower persistence and informational quality of the accrual component within earnings. Earnings consist of both cash flow and accrual components, but while cash flows are directly observable and more persistent, accruals involve subjective managerial estimates and tend to be less persistent. Despite this

difference, investors often treat accrual-based earnings as equivalent to cash flows, leading to mispricing. As a result, firms with high accruals subsequently experience lower stock returns compared to firms with low accruals. This anomaly reflects the market's delayed adjustment to the lower quality of accrual earnings, causing a predictable negative relation between current accruals and future stock returns.

The behavioural explanation of the accrual anomaly centers on investors' cognitive limitations, such as earning fixation and limited attention (Hirshleifer et al., 2012; Sloan, 1996). Earning fixation refers to investors' tendency to focus on reported earnings as a whole, without adequately distinguishing between the more persistent cash flow component and the less persistent accrual component. This fixation leads investors to treat accrual-based earnings similarly to cash flows, despite accruals being subject to managerial discretion and less likely to recur. Limited attention exacerbates this issue, as investors often lack the capacity or motivation to thoroughly analyze the detailed components within earnings (Hirshleifer et al., 2012). Consequently, they overlook the lower quality and persistence of accruals, resulting in systematic mispricing where firms with high accruals earn lower future stock returns (Sloan, 1996). This behavioral bias contributes to the delayed market adjustment observed in the accrual anomaly.

Non-behavioral explanations for the accrual anomaly focus on fundamental economic factors rather than investor cognitive biases. One such explanation relates to investment growth, where firms with high accruals often engage in aggressive investment strategies that may lead to overinvestment or inefficient capital allocation, thereby reducing future profitability and stock returns (Fairfield et al., 2003; Titman et al., 2004). Q-theory complements this view by linking a firm's investment decisions to changes in its discount rate. When a firm's discount rate falls, its investment opportunities become more profitable, prompting the firm to optimally increase its working capital investments, resulting in high accruals. Consequently, the subsequent lower stock returns associated with high accruals do not indicate mispricing but rather reflect the rationally expected lower discount rate going forward (Wu, Zhang, & Zhang, 2010). The risk explanation posits that accruals capture underlying risk factors not fully accounted for by standard asset pricing models. Rather than invoking mispricing or behavioral biases, this view argues that high accrual firms are actually exposed to lower underlying risks, such as lower financial distress risk, lower expected discount rates, or lower adverse selection risk, which rationally explains why they earn lower future stock returns (Isoyama, 2024; Wu, Zhang, & Zhang, 2010).

Recent evidence indicates that the accrual anomaly, once a robust predictor of future stock returns, has weakened or disappeared, particularly in developed markets like the United States (Green, Hand, & Soliman, 2009). Returns from strategies exploiting the accrual anomaly have diminished to the point of non-profitability, largely due to increased market efficiency and arbitrage activities by institutional investors and quantitative hedge funds (Green, Hand, & Soliman, 2009). This influx of capital and improved investor sophistication has progressively eliminated the mispricing associated with accruals, resulting in the anomaly's apparent disappearance (Collins, Gong, & Hribar, 2003; Greene, Hand, & Soliman, 2009).

The Efficient Market Hypothesis (EMH) posits that financial markets fully and instantaneously incorporate all available information into stock prices, making it impossible to consistently achieve abnormal returns through information-based trading. Under this

framework, new information is rapidly reflected in stock prices as investors act upon it. The speed of this informational integration depends dynamically on the level of market efficiency, investor sophistication, and the availability of timely disclosures (Ritter & Ugras, 2025). Enhanced market efficiency, historically driven by institutional arbitrage and advanced analytical tools, fundamentally accelerates this assimilation process, systematically compressing the lag between the release of financial data and its reflection in market prices (Choy et al., 2022; Ritter & Ugras, 2025).

The modern information environment explicitly facilitates this heightened efficiency by providing market participants with hyper-accessible, high-frequency financial data. For example, quarterly reporting cycles offer frequent updates on corporate financial performance, accelerating the assimilation of earnings components and reducing the structural persistence of mispricings (Ritter & Ugras, 2025). Furthermore, recent asset pricing literature demonstrates that this rapid data integration is heavily propelled by structural improvements in stock liquidity and institutional adaptive learning (Choy et al., 2022). Sophisticated institutional investors and quantitative hedge funds deploy extensive resources to actively exploit these signals, executing arbitrage strategies that progressively eliminate historical accounting anomalies (Greene et al., 2009). Collectively, these elements create a contemporary ecosystem where accrual information is integrated into stock prices far more promptly than traditional lagged models predict.

Taken together, the literature suggests that the accrual-return relation may depend not only on whether accrual information is priced, but also on the speed with which that information is incorporated into stock prices. Under the traditional behavioral explanation, limited investor attention to the accrual component of earnings can result in gradual price adjustment and subsequent return predictability. However, improvements in the information environment, including more frequent financial reporting, greater corporate disclosure, broader access to financial information through digital platforms, and enhanced analytical capabilities, may allow investors to evaluate accrual-related information earlier. In such an environment, the pricing implications of accruals may be reflected within the current-period return period rather than appearing as a predictable return in the subsequent year. This possibility does not necessarily imply that the underlying behavioral or economic mechanism has disappeared; rather, it suggests that the timing of price adjustment may have changed. Accordingly, this study examines whether total accruals are associated with current-period stock returns rather than only with one-year-ahead returns.

Accordingly, this study contributes to the literature in three respects. First, it distinguishes between delayed and same period accrual pricing by examining whether the negative association between accruals and stock returns occurs in the subsequent year or within the current return period. Second, it provides cross-market evidence by comparing Indonesia, an emerging market, with Singapore, a developed market, to examine whether differences in the market environment are associated with differences in the timing or magnitude of accrual pricing. Third, the use of panel data, country-by-year fixed effects, and additional analyses provides robustness in evaluating whether the observed relation is attributable to country-specific or period-specific factors. Through these analyses, the study examines whether the apparent weakening of the traditional accrual anomaly reflects a disappearance of accrual pricing or a change in the timing of its incorporation into stock prices.

The traditional accrual anomaly literature argues that investors initially misprice the accrual component of earnings, resulting in a negative association between current-period accruals and subsequent stock returns (Sloan, 1996). This phenomenon is explained using both behavioral explanations, which attribute the anomaly to investors' inability to distinguish accruals from cash flows, and rational explanations, which associate high accruals with lower expected returns through investment dynamics and risk adjustments (Fairfield et al., 2003; Wu et al., 2010). However, recent evidence suggests that the predictive power of accruals for future stock returns has weakened. Rather than indicating that accrual information has become irrelevant, the increasingly efficient information environment may have accelerated the incorporation of accrual information into stock prices. As investors continuously process accounting information released throughout the fiscal year, the pricing effect of accruals may occur faster instead of being delayed until the following year.

Based on the above argument, if investors continuously incorporate accrual-related information as it becomes available through periodic financial disclosures and other information channels, the valuation effect of accruals should be reflected in stock prices within the same fiscal period rather than in the subsequent year. Since higher accruals generally indicate lower earnings persistence and lower earnings quality, investors are expected to assign lower valuations to firms with relatively high accruals once this information is recognized. Consequently, firms with higher (lower) total accruals are expected to experience lower (higher) current-period stock returns. Therefore, the first hypothesis is formulated as follows:

H1: Total accruals are negatively associated with current-period stock returns.

MSCI classifies Singapore as a developed market and Indonesia as an emerging market based on criteria including economic development, market size and liquidity, and market accessibility (MSCI, 2026). These differences are also reflected in the quality of the corporate governance and information environment. The Asian Corporate Governance Association's CG Watch 2023 ranks Singapore substantially higher than Indonesia, with Singapore scoring 62.9% and ranking third among the 12 Asia-Pacific markets surveyed, while Indonesia scores 35.7% and ranks last (Asian Corporate Governance Association [ACGA], 2024). In a mature, well-governed market like Singapore, stringent disclosure standards improves the underlying quality of reported accruals. Conversely, in an emerging market setting like Indonesia, weaker corporate governance provide managers with greater discretion over reporting choices while limiting investors' capacity to evaluate accrual reliability. Where financial opacity is pronounced, investors are more susceptible to earnings fixation or demand a higher risk premium for accrual-related noise, thereby amplifying the pricing impact of accruals. Accordingly, given the differences in market maturity and governance efficacy, the empirical association between total accruals and stock returns should be stronger in Indonesia than in Singapore.

H2: The negative association between total accruals and current-period stock returns is stronger in Indonesia than in Singapore.

Methods

This study employs an unbalanced panel dataset of publicly listed Industrial Goods companies from Indonesia and Singapore over the period 2015–2024. Industrial companies

in the Industrial Goods sector were selected because they represent firms that carry massive amounts of inventory and deal extensively with accounts receivable and accounts payable, which are the sources of accrual. They also have relatively homogeneous operating characteristics and accounting practices compared with firms in other industries, thereby improving comparability across companies and countries. The sample comprises companies listed on the Indonesia Stock Exchange (IDX) and the Singapore Exchange (SGX). The initial population consists of all firms classified under the Industrial Goods sector according to the London Stock Exchange Group (LSEG) Refinitiv Thomson Reuters Business Classification (TRBC), retrieved as of June 2026. The universe was constructed to include both active and inactive companies under their primary listing, thereby reducing survivorship bias arising from firms that ceased trading prior to the data collection date.

Financial statement data, stock prices, market capitalization, beta, and other market-related variables are obtained exclusively from the LSEG Refinitiv Workspace database to ensure data consistency across the two countries. Although the study period spans from 2015 to 2024, financial and market data are collected from 2013 to 2025 to facilitate the construction of lagged and lead variables required for the empirical analysis. Specifically, prior-period financial information is required to calculate total accruals, asset growth, and other lagged accounting variables, while subsequent-period stock returns are required to examine the traditional accrual anomaly using one-year-ahead returns. To ensure that annual financial information has been fully disseminated and incorporated into stock prices, annual stock returns are measured from 30 April of year t to 30 April of year $t+1$. This return measurement window allows sufficient time for firms to publish their audited annual reports and for investors to process the disclosed information, thereby reducing potential biases arising from differences in reporting dates. After applying the sample selection criteria and excluding observations with incomplete financial or market data, the final sample consists of 65 Industrial Goods companies, comprising 23 Indonesian firms and 42 Singaporean firms, resulting in 537 firm-year observations. Table 1a and 1b summarizes the sample.

Table 1 and 2 show distribution of sample firms and observation coverage across Singapore and Indonesia. This table details the composition of sample firms and the number of annual observations available for each firm across the 10-year research window. The total dataset comprises an unbalanced panel of 65 companies and 537 firm-year observations, consisting of 42 Singaporean firms (371 observations) and 23 Indonesian firms (166 observations). "Years Observed" represents the specific time-series coverage per firm. A total of 35 companies (25 in Singapore and 10 in Indonesia) maintain complete 10-year observation histories, whereas 30 companies (17 in Singapore and 13 in Indonesia) contain partial observations due to mid-period listing dates or going private. This study employs two alternative measures of stock return as dependent variables to distinguish between current-period and delayed market pricing of accrual information.

The first dependent variable is future stock return (RET_{t+1}), calculated as the annual stock return measured from 30 April of year $t+1$ to 30 April of year $t+2$. This measure captures the stock price reaction occurring during the next fiscal period in which accrual information is generated. The second dependent variable is current-period stock return (RET_t), calculated as the annual stock return from 30 April of year t to 30 April of year $t+1$.

Table 1. Singapore Samples

Company	Yrs. Observed	Company	Yrs. Observed	Company	Yrs. Observed
ACMA	10	GPEI	10	SERL	10
AMOS	9	GSSE	9	SHTU	7
ANIH	10	HLEC	7	SIHM	6
ASLM	8	HTJT	10	SSHP	10
ATIC	10	ISDN	10	STEG	10
BHGC	9	JLJH	9	TAIS	10
BROO	10	MCHL	10	TEHO	10
CHOO	7	MSML	4	TION	10
EIND	8	NMCG	3	TRIC	5
ESGL	7	PNEI	10	WONG	8
FAEA	10	RLIM	6	WPML	10
FOPS	10	SARI	10	XMHL	10
FREN	10	SATK	10	YAZG	10
FUYU	10	SEAT	10	YNMH	9

Number of Company: 23; Number of Observations: 166; Number of Company with full years of observations: 10; Number of Company with partial years of observations: 13

Table 2. Indonesia Samples

Company	Yrs. Observed	Company	Yrs. Observed	Company	Yrs. Observed
AMIN	9	IKBI	10	MARK	7
APII	10	INTA	4	RGAS	1
BOLT	9	ISAP	2	SCCO	10
BRWY	9	JECC	10	SEMA	3
CTBN	9	KBLI	10	SUNI	2
GPSO	3	KBLM	10	TIRA	10
GRAN	5	KOBX	10	VOKS	10
HEXA	10	LABA	3		

Number of Company: 23; Number of Observations: 166; Number of Company with full years of observations: 10; Number of Company with partial years of observations: 13

The primary independent variable is Total Accruals (TACC). Total accruals measure the portion of accounting earnings that does not originate from operating cash flows and therefore reflect the accrual component of earnings. To examine whether the pricing of accrual information differs between Indonesia and Singapore, this study includes a country dummy variable and its interaction with total accruals. The country dummy (COUNTRY) equals one for Indonesian firms and zero for Singaporean firms.

The interaction variable (TACC $\times$ COUNTRY) captures whether the effect of total accruals on stock returns differs between the two markets. Following prior studies on the accrual anomaly and stock return predictability, this study includes several control variables that may influence stock returns. According to the Fama and French Three Factors Model, Price to Book Value, Firm Size, and Beta affect stock returns (Fama & French, 1992). Several papers found that profitability affects stock returns (Novy-Marx, 2013; Bouchaud et al., 2019). In this study, Return on Net Operating Assets (RNOA) is used as the measure of firm profitability rather than the more commonly used Return on Assets (ROA) or Return on Equity (ROE). RNOA measures the profitability generated by a firm's operating activities

relative to the net operating assets employed in those activities. It is calculated as EBIT divided by Net Operating Assets, as reported in Table 2. RNOA is selected because it focuses on operating profitability and does not use Net Income in its numerator. This distinction is important because Net Income is incorporated into the measurement of Total Accruals (TACC), creating overlap between TACC and a profitability control based on Net Income. Using RNOA therefore eliminate this overlap while allowing the model to control for differences in firms' profitability.

Cooper et al. (2008) found a negative relation between Asset Growth and subsequent stock returns. Watanabe et al. (2013) extended the investment anomaly literature internationally, validating that the asset growth effect operates across numerous global equity markets. Lastly, Jegadeesh and Titman (1993) found a momentum effect where previous stock returns affect current stock returns. Thus, the variables used in this paper are summarized in Table 2.

Table 3. Variables

Variable	Symbol	Measurement
Current-period Stock Return	RET_t	Annual stock return from 30 April (t) to 30 April ($t+1$)
Future Stock Return	RET_{t+1}	Annual stock return from 30 April ($t+1$) to 30 April ($t+2$)
Total Accruals	TACC	(Net Income – Operating Cash Flow) / Total Assets($t-1$)
Country Dummy	COUNTRY	1 = Indonesia; 0 = Singapore
Interaction	$TACC \times COUNTRY$	$TACC \times COUNTRY$
Price-to-Book Value	PBV	Market Price (t) / Book Value per Share (t)
Firm Size	SIZE	$\ln(\text{Market Capitalization in SGD}) (t)$
Market Beta	BETA	Beta obtained from LSEG Refinitiv. In order of preference: 5Y monthly, 3Y weekly, 2Y weekly, 180D daily, 90D daily
Return on Net Operating Assets	RNOA	EBIT (t) / Net Operating Assets (average $t-1$ and t)
Asset Growth	AG	$(\text{Total Assets } (t) - \text{Total Assets } (t-1)) / \text{Total Assets } (t-1)$
Momentum	RET_{t-1}	Previous year's stock return

Table 3 summarizes the variables employed in this study, including their symbols and measurement methods. The study examines the relationship between total accruals and stock returns while controlling for firm-specific characteristics, market risk, profitability, growth opportunities, and prior stock performance. To examine whether accrual information is incorporated into current-period rather than future stock returns, this study estimates two panel regression models. The first model examines the relationship between total accruals and subsequent stock returns, while the second model replaces the dependent variable with same period stock returns. Comparing the results of these two models enables this study to determine whether there is change in the timing of the pricing of accrual information.

Model 1: Delayed Pricing Model

$$RET_{i,t+1} = \beta_0 + \beta_1 TACC_{i,t} + \beta_2 COUNTRY_i + \beta_3 (TACC_{i,t} \times COUNTRY_i) + \sum_{k=1}^6 \beta_k CONTROL_{i,t} + \mu_i + \varepsilon_{i,t}$$

where:

- $RET_{i,t+1}$ = delayed stock return
- $TACC_{i,t}$ = total accruals
- $COUNTRY_i$ = country dummy (1 = Indonesia; 0 = Singapore)
Because $COUNTRY_i$ is time-invariant within each firm, its main effect is fully absorbed by the firm fixed effect (μ_i) and is therefore not separately identified in the fixed-effects specification; β_2 is retained in the equation for completeness of the model specification but does not appear as a distinct coefficient in the empirical results
- $TACC_{i,t} \times COUNTRY_i$ = interaction between total accruals and country
- $CONTROL_{i,t}$ = vector of control variables (PBV, SIZE, BETA, RNOA, AG, and MOM)
- μ_i = firm-specific fixed effect
- $\varepsilon_{i,t}$ = error term

The coefficient of primary interest is β_1 , which captures the relationship between total accruals and delayed stock returns for Singapore (the reference group). The interaction coefficient, β_3 , measures whether the effect of total accruals differs between Indonesian and Singaporean firms. Accordingly, the total effect of accruals for Indonesian firms is given by $(\beta_1 + \beta_3)$.

Model 2: Current-period Pricing Model

To examine the current-period accrual anomaly, the dependent variable is replaced with same periode stock returns while all explanatory variables remain unchanged.

$$RET_{i,t} = \beta_0 + \beta_1 TACC_{i,t} + \beta_2 COUNTRY_i + \beta_3 (TACC_{i,t} \times COUNTRY_i) + \sum_{k=1}^6 \beta_k CONTROL_{i,t} + \mu_i + \varepsilon_{i,t}$$

By comparing the estimated coefficients from Model 1 and Model 2, this study evaluates whether the pricing of accrual information occurs with a one-year delay or in the same period. The first hypothesis predicts a negative relationship between total accruals and current-period stock returns. Therefore, support for H1 is indicated by a significantly negative coefficient of β_1 in model 2. The second hypothesis predicts that the negative effect of total accruals is stronger in Indonesia than in Singapore. Since Indonesia is coded as one and Singapore as zero, support for H2 requires the interaction coefficient β_3 to be significantly negative. The total effect of total accruals on Indonesian firms is evaluated as $(\beta_1 + \beta_3)$, which is estimated using the linear combination (lincom) procedure. The empirical analysis is conducted using Stata. Prior to the regression analysis, the dataset is declared as panel data using firm identifiers and fiscal years. All continuous variables are winsorized at the 1st and 99th percentiles.

The selection of the appropriate panel regression model follows a two-stage procedure. First, the Chow test is employed to compare the pooled ordinary least squares (OLS) model

with the fixed-effects (FE) model. A significant Chow test indicates that firm-specific effects exist and that the fixed-effects specification is preferred over pooled OLS. Second, the Hausman test is performed to determine whether the fixed-effects or random-effects (RE) estimator is more appropriate. Before conducting the regression analysis, multicollinearity is assessed using the Variance Inflation Factor (VIF). For all regressions, heteroscedasticity is examined using the Modified Wald test, while autocorrelation is assessed using the Wooldridge test.

To provide further insights into the pricing of accrual information, several additional analyses are performed. First, the sample is partitioned into Indonesian and Singaporean firms, and the regression model is estimated separately for each country. This analysis allows the relationship between total accruals and stock returns to be examined within each market independently, providing a direct comparison of the magnitude and statistical significance of the accrual effect across the two countries. Given that the number of firm clusters in the panel dataset is relatively modest, the main regressions for the full sample as well as the Indonesian and Singaporean subsamples are further re-estimated using the wild cluster bootstrap procedure. This robustness check provides more reliable statistical inference in the presence of a limited number of clusters and ensures that the reported significance levels are not driven by potential small-sample bias in conventional cluster-robust standard errors.

Second, to examine whether the timing of accrual pricing has changed in recent years, the sample period is divided into two sub-periods. A dummy variable (POST) is created, taking the value of one for observations from 2020 onward and zero otherwise. An interaction term ($TACC \times POST$) is then incorporated into the regression model to test whether the relationship between total accruals and current-period stock returns differs between the two periods.

Third, given the relatively small number of firm clusters (65 companies), a wild cluster bootstrap robustness check is performed following the main fixed-effects regressions. Conventional cluster-robust standard errors may provide unreliable inference when the number of clusters is limited, whereas the wild cluster bootstrap offers more accurate p-values by constructing the empirical distribution of the test statistics through repeated cluster-level resampling. Using 9,999 bootstrap replications, this procedure is applied to the all sample and the two country subsamples to verify that the statistical significance of the main findings is robust to finite-cluster inference.

Fourth, an additional test was conducted to determine if the pooled regression model's sensitivity is affected by the assumption that control variable effects are uniform across Indonesia and Singapore. In the initial model, only the impact of total accruals was allowed to vary between the two countries through the interaction term ($TACC \times COUNTRY$), while the control variables' coefficients were considered constant. To challenge this assumption, interaction terms between COUNTRY and each control variable (PBV, SIZE, BETA, RNOA, AG, and MOMENTUM) were added to the fixed-effects regression model. A joint Wald test was then used to evaluate the collective significance of these interaction terms. This analysis investigates whether permitting different slopes for the control variables significantly alters the pooled model's specification and whether the main conclusions about total accruals' pricing remain consistent with a more adaptable empirical model.

Fifth, to verify that the documented pricing of accruals is not influenced by the release of

annual financial statements, a different definition of current-period stock return is used as a robustness check. In the primary analysis, the current-period stock return is calculated from April 30 of year t to April 30 of year $t+1$, which partially coincides with the public release of the annual report for fiscal year t . To separate the pricing effect before the annual report is made public, the return window is redefined as the cumulative stock return from April 30 to December 31 of the same fiscal year. This alternative approach excludes the period when the annual report is typically released, thereby minimizing the chance that the observed relationship between accruals and stock returns is merely a reflection of investors' immediate reactions to the publication of annual financial statements. If the main findings remain consistent with this alternative return window, it would indicate that the pricing of accrual information is already incorporated into stock prices before the annual report is released, rather than being solely due to announcement-period effects.

Sixth, to mitigate the risk of omitted variable bias due to fluctuating macroeconomic conditions and unique market trends in different countries, the model is recalculated with country-by-year fixed effects. Although the original model accounts for firm-specific, time-invariant unobservable heterogeneity using firm fixed effects, equity returns can also be influenced by broader annual events like changes in monetary policy, inflation, currency fluctuations, and country-specific market cycles. By incorporating country-by-year fixed effects, the model captures unobserved factors common to firms within the same country and year, allowing the accrual-return relationship to be identified from within-firm variations compared to other firms in the same country-year. The result of this robustness check is then evaluated against the original model to determine if the estimated link between total accruals and stock returns is affected by annual market conditions specific to each country. If the TACC coefficient remains consistent in direction and statistical significance, it would further support that the observed relationship is not mainly due to market movements specific to a country-year.

Result and Discussions

Table 4 presents the descriptive statistics for all data. Table 5 and 6 present descriptive statistic for Singapore and Indonesia data respectively.

Table 4. All Samples Descriptive Statistic

Variable	n	Mean	Std Deviation	Minimum	Maximum
Stock Return (t-1)	537	0.026	0.493	-0.72	2.308
Stock Return	537	0.052	0.52	-0.719	2.356
Stock Return (t+1)	537	0.132	0.598	-0.667	2.876
Total Accrual	537	-0.026	0.102	-0.31	0.344
PBV	537	1.001	1.044	0.156	5.58
Size	537	17.779	1.677	14.453	23.182
RNOA	537	0.061	0.149	-0.451	0.492
Beta	537	0.726	0.666	-1.131	2.555
Asset Growth	537	0.029	0.185	-0.473	0.783

Table 5. Singapore Samples Descriptive Statistic

Variable	n	Mean	Std Deviation	Minimum	Maximum
Stock Return (t+1)	371	0.099	0.596	-0.667	2.876
Total Accrual	371	-0.038	0.09	-0.308	0.344
PBV	371	0.831	0.917	0.156	5.52
Size	371	17.716	1.875	14.453	23.182
RNOA	371	0.039	0.149	-0.451	0.492
Beta	371	0.793	0.66	-1.131	2.554
Asset Growth	371	0.006	0.162	-0.473	0.783

Table 6. Indonesia Samples Descriptive Statistic

Variable	n	Mean	Std Deviation	Minimum	Maximum
Stock Return (t+1)	166	0.203	0.597	-0.586	2.876
Total Accrual	166	0.002	0.119	-0.308	0.344
PBV	166	1.38	1.202	0.209	5.58
Size	166	17.919	1.109	15.036	19.919
RNOA	166	0.108	0.137	-0.32	0.492
Beta	166	0.576	0.655	-1.132	2.554
Asset Growth	166	0.082	0.218	-0.402	0.782

Table 4 presents the descriptive statistics for the full sample, whereas Tables 5 and 6 report the statistics for Singaporean and Indonesian firms, respectively. The full sample consists of 537 firm-year observations, including 371 observations from Singapore and 166 observations from Indonesia. Descriptive statistics indicate that Indonesian firms generally exhibit higher average stock returns, price-to-book ratios, return on net operating assets, asset growth, and total accruals than Singaporean firms. Meanwhile, Singaporean firms tend to have slightly larger firm size and higher market beta. These descriptive differences provide initial evidence of the distinct characteristics of firms operating in the two markets.

From tables 4, 5, and 6, the number of samples from Singapore is greater than that from Indonesia. The mean accrual in Singapore is negative, while it is positive for Indonesia. This result aligns with the fact that Indonesia is a developing country, whereas Singapore is a developed one. Developed companies in Singapore do not need to support growth as much, whereas Indonesian companies still need to use cash flow for growth. This is also reflected in the difference in asset growth and stock return, with the Indonesian sample being much higher than the Singaporean sample.

Table 7. Results of Heteroscedasticity and Autocorrelation Tests

Regression	Modified Wald (Hetero)		Wooldridge (Auto)	
	p	Remark	p	Remark
Model 1 All sample	0.000	Hetero	0.963	No Auto
Model 2 All sample	0.000	Hetero	0.000	Auto
Model 2 Singapore Sample	0.000	Hetero	0.000	Auto
Model 2 Indonesia Sample	0.000	Hetero	0.000	Auto

Table 7 presents the post-estimation diagnostic test results for panel heteroscedasticity and first-order autocorrelation across all specification models. Groupwise heteroscedasticity is evaluated using the Modified Wald test. First-order serial correlation

is evaluated using the Wooldridge test for autocorrelation in panel data. "Hetero" indicates the rejection of homoskedasticity at the 1% significance level ($p < 0.01$). "Auto" indicates the rejection of no first-order autocorrelation at the 1% significance level ($p < 0.01$), whereas "No Auto" indicates failure to reject the null hypothesis of no autocorrelation.

Table 8. Result of Multicollinearity Test

Independent Var	VIF	Remark
TACC	1.75	No multicollinearity
Size	1.63	
RNOA	1.63	
TACC x COUNTRY	1.54	
PBV	1.52	
AG	1.47	
RET(t)	1.25	
RET(t-1)	1.23	
COUNTRY	1.18	
BETA	1.06	

Table 8 presents the Variance Inflation Factor (VIF) values for all independent and control variables included in the regression models to test for potential multicollinearity. A VIF value threshold below 5.0 is widely accepted in empirical asset pricing literature as indicating the absence of severe multicollinearity. The maximum VIF observed is 1.75 for Total Accruals (TACC), confirming that multicollinearity does not distort the estimated coefficients or standard errors in this study.

Prior to estimating the regression models, several diagnostic tests were conducted to determine the appropriate estimation method and to assess potential violations of classical assumptions. The Chow test and Hausman test consistently indicate that the Fixed Effects (FE) model is the most appropriate specification for both Model 1 and Model 2. The Modified Wald test further reveals the presence of groupwise heteroscedasticity in all estimated models, while the Wooldridge test detects first-order serial correlation in all current-period return regressions (Model 2), although no evidence of serial correlation is found for the future return model (Model 1). In addition, the multicollinearity test shows that all Variance Inflation Factor (VIF) values are well below the commonly accepted threshold of 5, indicating that multicollinearity is not a concern. Given the presence of heteroscedasticity across all models and serial correlation in the current-period return regressions, all Fixed Effects estimations are reported using cluster-robust standard errors at the firm level ($\text{vce}(\text{cluster company})$). This estimation approach provides robust statistical inference by accounting for both heteroscedasticity and within-firm error dependence over time, while maintaining a consistent estimation strategy across all regression models. The result of the regression is as per table 9.

Table 9 reports the fixed-effects regression results for Model 1, which examines the relationship between total accruals and one-year-ahead stock returns. The overall model is statistically significant ($F \text{ sig} = 0.000$) and explains 12.99% of the within-firm variation in future stock returns. The coefficient of total accrual is negative but statistically insignificant, indicating that accrual information does not predict one-year-ahead stock returns. Likewise, the interaction between total accrual and country is insignificant, suggesting that

the relationship does not differ between Indonesia and Singapore. Among the control variables, only current-period stock return and previous stock return are negatively associated with future stock returns, while firm size exhibits a negative and statistically significant effect

Table 9. Model 1 Regression

Dependent Variable: Stock Return (t+1)	All Sample (n = 537, F Sig = 0.000, R square = 12.99%)	
	Coef	Sig
Total Accrual	-0.084	0.853
Total Accrual X Country Code	-0.288	0.394
Asset Growth	0.162	0.413
Beta	-0.096	0.413
PBV	0.061	0.457
RNOA	0.501	0.231
Size	-0.420	0.000***
Stock Return (t)	-0.135	0.047**
Stock Return (t-1)	-0.128	0.026**

According to Table 9, Total Accrual does not correlate with future stock returns. Among the control variables, only size and past stock returns show significance. Interaction term (Total Accrual x Country Code) is also not significant, suggesting that the relationship does not differ between Indonesia and Singapore market. Similar to Model 1, the Chow test and Hausman test indicate that the Fixed Effect is the most suitable regression model for Model 2. The regression results are presented in Table 10, which also includes the results of the same regression applied exclusively to the Indonesia and Singapore samples.

Table 10. Model 2 Regression

Independent Variable: Stock Return (t)	All Sample (n = 537, F Sig = 0.000, R square = 19.22%)		Indonesia Sample (n=166, F sig = 0.000, R square = 39.69%)		Singapore Sample (n = 371, F sig = 0.0125, R square = 11.19%)	
	Coef	Sig	Coef	Sig	Coef	Sig
Total Accrual	-0.955	0.006***	-1.770	0.000***	-0.499	0.099*
Total Accrual X Country Code	-0.147	0.693	na	na	na	na
Asset Growth	0.706	0.000***	0.998	0.000***	0.547	0.034**
Beta	-0.052	0.367	-0.069	0.401	-0.023	0.785
PBV	0.174	0.057*	0.221	0.094*	-0.100	0.397
RNOA	1.260	0.000***	2.236	0.000***	0.952	0.012**
Size	-0.047	0.579	0.059	0.707	-0.034	0.727
Stock Return (t-1)	-0.244	0.000***	-0.443	0.000***	-0.171	0.005***
[lincom] Total Accrual + (Total Accrual X Country Code)	-1.102	0.001***	na	na	na	na

Table 10 reports the fixed-effects regression results for Model 2, where current-period stock return is used as the dependent variable. Unlike the results reported in Table 5, total accrual exhibits a statistically significant negative relationship with current-period stock returns, indicating that accrual information is reflected in stock prices during the same fiscal period rather than in the subsequent year. The interaction term between total accrual and country is insignificant, suggesting that the effect of accrual to stock return does not differ significantly between the Indonesian and Singaporean markets. The lincom test further confirms that the effect of total accrual remains significantly negative for the Indonesian sample. Separate regressions for each country also reveal a negative relationship between total accrual and current-period stock returns. Overall, the findings provide evidence that accrual information is incorporated into stock prices within the same fiscal period in both markets.

All sample results in Table 10 show that Total Accrual negatively correlates with current-period stock returns in both the Singapore and Indonesia (lincom result) markets. The interaction term (Total Accrual X Country Code) is not significant, suggesting there is no difference between the Singapore and Indonesia markets in terms of the correlation between Total Accrual and current-period stock returns. The correlations are positive for Asset Growth and RNOA, while negative for previous stock returns. The model is significant at the 0.000 significance level, with independent variables explaining 19.22% of the dependent variable.

Some of the control variables show results that differ from theory. Beta and firm size are not significantly associated with current-period stock returns, while price-to-book value (PBV) is positively associated with stock returns. The insignificance of beta suggests that systematic risk might not be the primary determinant of stock returns within the Industrial Goods sector during the sample period. Similarly, the insignificant coefficient on firm size indicates that, after controlling for firm-specific factors, differences in company size provide limited explanatory power for return variation. In contrast, the positive coefficient on PBV suggests that firms with stronger market valuation tend to experience higher current-period returns. Finally, previous stock return is negatively associated with current stock return, indicating the presence of short-term return reversal rather than momentum, consistent with the findings of De Bondt and Thaler (1985).

From a behavioral standpoint, the traditional accrual anomaly is linked to investors' initial focus on reported net income, often overlooking the difference between its accrual and cash-flow components. As a result, the information within accruals might not be fully reflected in stock prices when earnings are first announced, leading to a pricing effect that becomes apparent only in later stock returns. This study's finding of an insignificant link between total accruals and stock returns one year ahead suggests that this delayed incorporation is no longer present during the sample period. Conversely, the significant negative relationship between total accruals and current-period stock returns implies that accrual information is now integrated into stock prices within the same period. One reason for this could be the wider availability and quicker dissemination of financial information, which has accelerated the information-processing and pricing process. Investors can access accounting information through regular financial reports and increasingly available information channels, enabling them to evaluate the accrual component of earnings sooner than the traditional accrual-anomaly framework assumes. Consequently, instead of causing

a delayed return effect in the following year, the negative pricing implications of higher accruals may be factored into stock prices earlier, resulting in a significant current-period association but no additional link with future returns.

Apart from behavioral explanation, the findings can also be interpreted through q-theory. Under this framework, accruals partly reflect firms' investment decisions, as changes in discount rates affect the level of investment in operating assets. Thus higher investment is both associated with higher accruals and lower discount rate without requiring investors to misprice accounting information. Under a slower information environment, the implications of firms' investment decisions is incorporated into stock prices with a delay, generating an association between accruals and subsequent returns. The absence of a significant one-year-ahead relation in the present study, however, suggests that this delayed pricing channel is not evident in the sample. The significant current-period relation may instead indicate that the information contained in firms' investment and accrual decisions is incorporated into prices earlier. This interpretation is consistent with a more timely transmission of fundamental information into stock prices, although the present study does not directly test the q-theory mechanism or establish that changes in discount rates cause the observed accrual-return relation.

Taken together, the behavioral and q-theory perspectives suggest that the observed results primarily reflect a change in the timing of accrual pricing, consistent with the more timely incorporation of accrual-related information into stock prices. However, the evidence does not allow us to distinguish whether this earlier pricing reflects faster correction of behavioral mispricing or faster incorporation of fundamental information related to firms' investment decisions and discount rate.

Comparison between the Indonesian and Singaporean samples shows that total accrual is negatively associated with current-period stock returns in both markets. The coefficient is larger in the Indonesian sample (-1.770) than in the Singaporean sample (-0.499). In Indonesia, the relationship is significant at the 1% level, whereas in Singapore it is significant only at the 10% level. However, the interaction term between total accrual and country is statistically insignificant, indicating that the apparent difference in coefficient magnitude cannot be reliably distinguished from sampling variation. Therefore, the results do not provide statistical support for H2, suggesting that the effect of total accrual on current-period stock returns is broadly similar across the two markets. Overall, the model has greater explanatory power in the Indonesian sample, with a significance of 0.000 and an R square of 39.69%, compared to the Singapore sample, where the significance is 0.0125 and the R square is 11.19%. It is possible that, as a developed market, stock returns in Singapore are influenced by a broader array of factors, such as global capital flows and international news, making firm-specific accounting metrics explain a smaller fraction of return variance.

The insignificant interaction between total accruals and country indicates that the negative association between total accruals and current-period stock returns does not differ significantly between Indonesia and Singapore. This finding is noteworthy given that Singapore is classified as a developed market whereas Indonesia is classified as an emerging market, and Singapore exhibits a substantially stronger corporate governance. These differences would suggest that Singaporean investors may incorporate accounting information more efficiently. However, the results indicate that differences in overall

market development and governance do not translate into differences in the pricing of accrual information. One possible explanation is that the information relevant to accrual pricing has become sufficiently accessible to investors in both markets, allowing accrual-related information to be incorporated into stock prices within the current period despite differences in the broader institutional environments. Thus, the absence of a significant country interaction suggests that the effect of accrual to stock return may be less dependent on the overall development of the capital market than initially hypothesized. This finding should not be interpreted as evidence that Indonesia and Singapore have identical levels of market efficiency; rather, it indicates that the study finds no statistically significant difference in the specific relation between total accruals and current-period stock returns across the two markets.

The economic magnitude of the accrual effect is considerable. A one standard deviation increase in total accruals (0.102 for the full sample) is associated with a 9.74 percentage point decline in current-period stock returns. This effect is more pronounced within the Indonesian subsample, where a one standard deviation increase in total accruals (0.119) corresponds to a 21.06 percentage point decline in returns, compared to a 4.49 percentage point decline in the Singapore subsample (based on a standard deviation of 0.090). Relative to the standard deviation of current-period stock returns (52.0% for the full sample, 59.7% for Indonesia, and 59.6% for Singapore), these effects represent approximately 0.19, 0.35, and 0.08 standard deviations of return, respectively, indicating that the pricing of accrual information is not only statistically significant but also economically meaningful, particularly in the Indonesian market.

To provide further evidence on the timing of accrual pricing, this study performs an additional analysis by examining whether the relationship between total accruals and current-period stock returns differs before and after 2020. A dummy variable (POST) is created, taking the value of one for observations from 2020 to 2024 and zero otherwise. An interaction term ($TACC \times POST$) is then included in the current-period pricing model. A significantly negative interaction coefficient would indicate that the pricing effect of accrual information became stronger during the post-2020 period. Result shows the interaction term is not significant ($sig = 0.790$). The insignificant interaction coefficient suggests that the current-period pricing of accrual information is not a phenomenon unique to the post-2020 period. Instead, the evidence indicates that investors had already been incorporating accrual information into stock prices within the same fiscal period before 2020. The absence of a significant difference between the two sub-periods implies that the current-period pricing of accrual information is a stable characteristic of the Indonesian and Singaporean equity markets throughout the 2015–2024 sample period, rather than a recent phenomenon emerging after 2020.

To address the small sample size (65 in total, with 23 from Indonesia and 42 from Singapore), a robustness check is performed using wild cluster bootstrap tests with 9,999 replications. These tests are conducted for the entire sample, as well as for the Indonesia and Singapore subsamples. The results are presented in Table 11 and Table 12.

Table 11. Wild Bootstrap Result of All Sample

Variable Tested	FE Coefficient	Conventional p-value	Wild Bootstrap t-statistic	Wild Bootstrap p-value
Total Accrual	-0.955	0.006***	-2.855	0.008***
Total Accrual X Country Code	-0.147	0.693	-0.396	0.7117
[lincom] Total Accrual + (Total Accrual X Country Code)	-1.102	0.001***	-3.480	0.0151**

Table 11 presents the results of the wild cluster bootstrap robustness test for the pooled sample. The bootstrap p-values are qualitatively consistent with those obtained from the conventional cluster-robust standard errors. Total accrual remains significantly negatively associated with current-period stock returns, whereas the interaction between total accrual and country remains insignificant. The linear combination of coefficients for the Indonesian sample also remains significantly negative. These findings indicate that the study's main conclusions are robust to finite-cluster inference.

Table 12. Wild Bootstrap Result of Indonesia and Singapore Sample

Market	Variable Tested	FE Coefficient	Conventional p-value	Wild Bootstrap t-statistic	Wild Bootstrap p-value
Indonesia Sample	Total Accrual	-1.770	0.000***	-4.784	0.009***
Singapore Sample	Total Accrual	-0.499	0.099*	-1.690	0.0982*

Table 12 reports the wild cluster bootstrap robustness test for the Indonesia and Singapore subsamples. The results are qualitatively identical to those obtained from the conventional fixed-effects regressions. Total accrual remains negatively associated with current-period stock returns in both Indonesia and Singapore, while the statistical significance of the relationship is preserved after bootstrap inference. As reported in Tables 11 and 12, the bootstrap results are qualitatively identical to those obtained using conventional cluster-robust standard errors. For the pooled sample, total accrual remains significantly negatively associated with current-period stock returns, while the interaction between total accrual and country remains statistically insignificant. Similarly, the combined effect of total accrual for Indonesian firms remains significantly negative. The country-specific bootstrap results also confirm the main findings: total accrual continues to exhibit a significant negative association with current-period stock returns in both Indonesia and Singapore, with significance levels unchanged from the conventional estimation. Overall, these results indicate that the principal conclusions of this study are robust to finite-cluster inference and are not driven by the relatively small number of firm clusters.

To assess the stability of the pooled regression model, we conducted an additional analysis that allowed the effects of all control variables to differ by country. Specifically, we

introduced interaction terms between COUNTRY and each control variable (PBV, SIZE, BETA, RNOA, AG, and MOMENTUM) into the fixed-effects regression. This approach challenges the initial assumption that control variables have the same impact in Indonesia and Singapore, thereby examining whether variations in slopes affect the study's primary conclusions. The findings are detailed in Table 13.

Table 13. Model 2 Regression with Control Variable Interaction Terms

Independent Variable: Stock Return (t)	Baseline Regression (F Sig = 0.000, R square = 19.22%)		Interaction Term Regression (F Sig = 0.000, R square = 21.89%)	
	Coef	Sig	Coef	Sig
Total Accrual	-0.955	0.006***	-0.972	0.011**
Total Accrual X Country Code	-0.147	0.693	-0.152	0.767
Asset Growth	0.706	0.000***	0.618	0.020**
Beta	-0.052	0.367	-0.290	0.728
PBV	0.174	0.057*	0.093	0.426
RNOA	1.260	0.000***	1.020	0.008***
Size	-0.047	0.579	-0.036	0.710
Stock Return (t-1)	-0.244	0.000***	-0.164	0.008***
PBV X Country Code			0.128	0.464
Size X Country Code			0.100	0.602
Beta X Country Code			-0.052	0.644
RNOA X Country Code			1.137	0.077*
Asset Growth X Country Code			0.243	0.461
Stock Return (t-1) X Country Code			-0.268	0.002***

Table 13 presents the robustness test in which interaction terms between COUNTRY and all control variables are incorporated into the pooled fixed-effects regression. This specification relaxes the assumption that the effects of the control variables are identical across Indonesia and Singapore. The results show that the coefficients of Total Accrual and Total Accrual × Country remain virtually unchanged in both magnitude and statistical significance, indicating that the study's principal findings are robust to a more flexible model specification. Among the interaction terms for the control variables, only the interaction between Momentum and Country is significant at the 1% level, while the interaction between RNOA and Country is marginally significant at the 10% level. The remaining interaction terms are statistically insignificant, suggesting that the observed cross-country heterogeneity is limited to only a subset of the control variables.

Table 13 presents the findings from regression which includes interaction terms between COUNTRY and all control variables. In comparison to the baseline model, the coefficient for Total Accrual remains nearly the same (−0.972 vs. −0.955) and continues to be statistically significant. Interaction between Total Accrual and COUNTRY is not significant ($p = 0.767$), just as in the baseline model. These results suggest that the conclusion about the lack of significant cross-country differences in accrual pricing holds

true even with a more flexible model. Among the additional interaction terms, only Momentum $\times$ COUNTRY is significant at the 1% level, while RNOA $\times$ COUNTRY is marginally significant at the 10% level. This indicates that market heterogeneity is limited to certain control variables. Additionally, a joint Wald test rejects the null hypothesis that all control-variable interaction terms are jointly zero ($F = 2.28$, $p = 0.0468$), suggesting broader cross-country slope heterogeneity. Despite this, the main finding of the study remains unchanged, as the interaction between Total Accrual and COUNTRY remains statistically insignificant, even when allowing for variations in control variable effects between Indonesia and Singapore.

To prevent stock returns from being influenced by the publication of financial reports, a different definition of current-period stock return is employed. The original definition considers the stock return from 30 April in year t to 30 April in year $t+1$. This period can be impacted by financial reports released between 1 January $t+1$ and 30 April $t+1$. Therefore, an alternative definition is adopted, where the return period spans from 30 April year t to 31 December year t , covering eight months. The findings are detailed in Table 9.

Table 14. Model 2 Regression with Alternative Definition of Current-period Stock Return

	Dependent Variable: 12 Months Stock Return (F Sig = 0.000, R square = 19.22%)		Dependent Variable: 8 Months Stock Return (F Sig = 0.000, R square = 20.80%)	
	Coef	Sig	Coef	Sig
Total Accrual	-0.955	0.006***	-0.865	0.009***
Total Accrual X Country Code	-0.147	0.693	0.205	0.360
Asset Growth	0.706	0.000***	0.394	0.034**
Beta	-0.052	0.367	-0.070	0.182
PBV	0.174	0.057*	0.169	0.110
RNOA	1.260	0.000***	0.650	0.031**
Size	-0.047	0.579	0.149	0.055
Stock Return (t-1)	-0.244	0.000***	-0.202	0.000***
[lincom]	-1.102	0.001***	-0.660	0.004***
Total Accrual + (Total Accrual X Country Code)				

Table 14 Robustness test using an alternative definition of current-period stock return. The baseline regression measures current-period stock return over a 12-month period (30 April of year t to 30 April of year $t+1$), while the robustness regression measures stock return over an 8-month period (30 April to 31 December of year t), thereby excluding the period during which the annual report is typically released. Both regressions are estimated using the fixed-effects model with cluster-robust standard errors at the firm level. The results show that Total Accrual remains negatively and significantly associated with current-period stock returns under the alternative return window, whereas the interaction term between Total Accrual and Country remains insignificant. These findings indicate that the main conclusions are robust to an alternative definition of current-period stock return and suggest that the observed pricing of accrual information is not solely driven by

investors' reaction to the release of annual financial statements.

Table 14 presents the robustness test results using a different definition of current-period stock return. The stock return is now measured from 30 April to 31 December of year t , excluding the months when the annual report is usually released. The findings remain consistent, showing that Total Accrual still has a negative and statistically significant relationship with current-period stock returns (coefficient = -0.865 , $p = 0.009$). The interaction term between Total Accrual and Country remains insignificant ($p = 0.360$). Similarly, the combined accrual effect for the Indonesian sample continues to be negative and significant (coefficient = -0.660 , $p = 0.004$). These results suggest that the main conclusions are robust to this alternative return window, indicating that the pricing effect of accruals is already incorporated into stock prices before the annual report is released, rather than being solely due to investors' immediate reactions to the report's publication.

To address the possibility that the baseline results are affected by country-specific time-varying factors, the original model is re-estimated by incorporating country-by-year fixed effects in addition to firm fixed effects. These fixed effects absorb unobserved factors that are common to firms within the same country and year, including country-specific macroeconomic conditions, market-wide movements, and other annual shocks that may influence stock returns. This specification therefore provides a more stringent test of whether the observed association between total accruals and current-period stock returns persists after accounting for country-year-specific conditions. The results are presented in Table 15.

Table 15. Model 2 Regression with Country-by-year Fixed Effects

Dependent Variable: 12 Months Same Period Stock Return	No country-by-year fixed effects (F Sig = 0.000, R square = 19.22%)		With country-by-year fixed effects (F Sig = 0.000, R square = 35.73%)	
	Coef	Sig	Coef	Sig
Total Accrual	-0.955	0.006***	-0.752	0.028**
Total Accrual X Country Code	-0.147	0.693	0.085	0.823
Asset Growth	0.706	0.000***	0.645	0.001***
Beta	-0.052	0.367	-0.028	0.604
PBV	0.174	0.057*	0.152	0.054*
RNOA	1.260	0.000***	1.152	0.001***
Size	-0.047	0.579	-0.026	0.754
Stock Return (t-1)	-0.244	0.000***	-0.240	0.000***

Table 15 Robustness test controlling for country-by-year fixed effects. The baseline regression includes firm fixed effects without country-by-year fixed effects, while the robustness regression incorporates country-by-year fixed effects to absorb time-varying macroeconomic shocks and market-wide return movements within each country. Both regressions are estimated using the fixed-effects model with cluster-robust standard errors at the firm level. The results show that Total Accrual remains negatively and significantly associated with current-period stock returns after controlling for country-by-year fixed effects, whereas the interaction term between Total Accrual and Country Code remains statistically insignificant

Table 15 shows that the results remain consistent with the original result. Total accruals (TACC) retain a negative and statistically significant association with current-period stock returns, with the coefficient changing from -0.956 ($p = 0.006$) in the baseline model to -0.752 ($p = 0.028$) after incorporating country-by-year fixed effects. Although the magnitude of the coefficient is somewhat reduced, the direction and statistical significance of the association remain unchanged, indicating that the negative relation between total accruals and current-period stock returns is not primarily attributable to country-specific time-varying market conditions. The $TACC \times COUNTRY$ interaction remains statistically insignificant ($p = 0.823$), providing no evidence that the accrual-return relation differs significantly between Indonesia and Singapore after controlling for country-year-specific effects. Overall, the results provide additional support for the robustness of the current-period accrual pricing relation.

Conclusion

This study re-examines the accrual anomaly in the Indonesian and Singaporean stock markets by examining whether total accruals are associated with future or current-period stock returns and whether the relation differs across markets and between the pre- and post-2020 periods. The results show that total accruals are not significantly associated with one-year-ahead stock returns but are negatively associated with current-period stock returns. The country interaction is also insignificant, indicating no statistically significant difference in the accrual-return relation between Indonesia and Singapore. Similarly, the pre- and post-2020 analysis provides no evidence of a change in the relation during the sample period.

Taken together, the findings are consistent with the possibility that accrual-related information is incorporated into stock prices earlier than suggested by the traditional future-return formulation of the accrual anomaly. Rather than indicating that accruals are no longer priced, the results suggest a possible change in the timing of accrual pricing from subsequent to current-period returns. This interpretation is consistent with both behavioral and q-theory perspectives, although the present study cannot distinguish whether earlier pricing reflects faster correction of behavioral mispricing or faster incorporation of information related to firms' discount factor. The absence of a significant difference between Indonesia and Singapore further suggests that broader differences in market development do not necessarily translate into differences in the pricing of accrual information.

Several limitations should be considered when interpreting these findings. First, the analysis uses annual total accruals although complete annual accrual information may not be available throughout the current-period return window; future research could employ quarterly accrual measures to examine the timing of information incorporation more precisely. Second, the sample is restricted to Industrial Goods firms in Indonesia and Singapore, with a relatively small Indonesian subsample, limiting the generalizability of the findings. Third, total accruals are examined rather than separating discretionary and non-discretionary components. Future research could extend the analysis across industries and a broader range of emerging and developed markets and examine whether the observed current-period pricing pattern is particularly associated with discretionary accruals.

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