Investigating the Accruals Anomaly in Egypt" Evidence from An Inefficient Market: An Empirical Study

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Scientific Journal for Financial and Commercial Studies and Research (SJFCSR)

Faculty of Commerce – Damietta University

Vol.7, No.1, Part 1., January 2026

APA Citation

El-Sayed, N. H. Y. and **Taha**, D. M. A (2026). "Investigating the accruals anomaly in Egypt" Evidence from an inefficient market: an empirical study, ***Scientific Journal for Financial and Commercial Studies and Research, Faculty of Commerce***, Damietta University, 7(1)1, 655-687.

Website: https://cfdj.journals.ekb.eg/

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Dr. Nehad Hosny Yusuf and Dr. Dina Mahmoud Taha

Abstract

This study investigates the presence and persistence of the accruals anomaly in the Egyptian stock market, a frontier market characterized by low liquidity, limited investor sophistication, and informational inefficiencies. Building on Sloan's (1996) foundational work, the research examines whether firms with high accruals experience systematically lower future valuation compared to those with low accruals—an anomaly that contradicts the Efficient Market Hypothesis (EMH). Using a panel dataset of 100 non-financial firms listed on the EGX from 2014 to 2022, the study employs both portfolio sorting and cross-sectional regression models, utilizing Tobin's Q as a proxy for future firm value. The empirical findings confirm a statistically significant negative relationship between total accruals and Tobin's Q, thereby supporting the existence of the accruals anomaly in Egypt. Moreover, the limited explanatory power of the regression model ($R^2 = 0.047$) and the significance of accruals in the absence of strong controls indicate that market inefficiency exacerbates the anomaly. These results suggest that investors in the Egyptian market may misprice accruals due to limited information processing capabilities and weak disclosure practices. The study contributes to the global literature by providing rare evidence from a highly inefficient market and offers policy implications related to financial reporting quality, investor education, and regulatory oversight.

Keywords: Accruals anomaly- Sloan 1996-Effiecient Market-Egyptian Stock Exchange.

1. Introduction

The Efficient Market Hypothesis (EMH), which asserts that stock prices fully and immediately reflect all available information, has long guided both academic theory and professional investment strategies. Yet, over the past decades, a growing body of empirical evidence has challenged this assumption by documenting capital market anomalies—systematic deviations from asset pricing models that cannot be justified by traditional risk factors. One such robust anomaly is the accruals anomaly, initially identified by Sloan (1996), which demonstrates that firms with high levels of accruals tend to experience lower subsequent stock returns than those with low accruals. This finding suggests that investors systematically misprice the accruals component of earnings, thereby violating EMH expectations.

The accruals anomaly has been widely confirmed across a range of developed and emerging markets, including the United States (Sloan, 1996), Korea (Kim et al., 2015), the United Kingdom (Papanastasopoulos, 2020), Vietnam (Dang & Tran, 2019), and Japan (Isoyama, 2024). These studies collectively point toward two principal explanations: the mispricing hypothesis, which attributes the anomaly to behavioral biases such as earnings fixation or investor overconfidence; and the risk-based hypothesis, which suggests that accruals may capture non-diversifiable risks or contain private information, thereby requiring risk premiums (Guo & Maio, 2020; Isoyama, 2024).

The behavioral strand of research highlights investor limitations in processing the differing persistence of accruals and cash flows. Empirical results consistently show that investors tend to overestimate the persistence of accruals and underestimate their noise, particularly when managerial discretion or earnings management practices obscure the quality of reported earnings (Xie, 2001; Bansal & Ali, 2021). Recent work has further refined this view by distinguishing between originating and reversing accruals, with the former being more susceptible to investor misjudgment due to higher uncertainty (Fedyk et al., 2020). Other studies also show that poor accruals quality is associated with greater information risk, especially in emerging markets where investor sophistication and reporting standards vary considerably (Nguyen et al., 2024).

On the other hand, some researchers argue that the accruals anomaly reflects rational pricing of information risk and adverse selection problems, particularly when informed investors exploit private information embedded in accruals signals (Isoyama, 2024). This perspective aligns with asset pricing models such as the Intertemporal Capital Asset Pricing Model (ICAPM), which integrates business cycle risk factors (Guo & Maio, 2020).

In light of these insights, the present study investigates whether the accruals anomaly is evident in the Egyptian stock market—an archetype of an inefficient, frontier market characterized by thin trading, low investor activism, and informational opacity. This research contributes to the extant literature by offering empirical evidence from Egypt, thereby addressing a geographic gap in anomaly studies. It also seeks to determine whether the anomaly in this context is better explained by behavioral mispricing, information asymmetry, or fundamental risk premia. By adopting both traditional and percent accruals measures and examining their relation to future returns, this study aims to uncover the underlying mechanisms driving the accruals anomaly in a market where institutional inefficiencies may amplify such effects.

1.1 Research Problem

While the accruals anomaly has been widely documented in developed markets, there is limited research exploring this phenomenon in emerging markets like Egypt. Egypt's stock market is often regarded as inefficient due to factors such as less rigorous enforcement of regulations, lower transparency, and relatively lower levels of investor sophistication. The aim is to assess whether these market characteristics contribute to the accruals anomaly and to provide insight into how accruals-based strategies perform in an inefficient market setting.

1.2 Research Questions

1. Does the accruals anomaly exist in the Egyptian stock market?

2. How does the inefficiency of the Egyptian market affect the pricing of accruals?

3. What factors contribute to the persistence of the accruals anomaly in Egypt?

2. Theoretical Background

2.1 The Accruals Anomaly Definition:

The accruals anomaly is considered one of the most prominent challenges to the Efficient Market Hypothesis (EMH), as it suggests that stock prices do not fully reflect the information embedded in the components of accounting earnings, particularly the accruals component. According to Sloan (1996), investors tend to overestimate the persistence of accruals-based earnings while underestimating the role of cash flows, even though cash flows are more reliable predictors of future earnings. He found that firms with high accruals tend to underperform those with low accruals in subsequent periods, indicating a pricing inefficiency in the market.

In this context, the accruals anomaly refers to a phenomenon where investors overestimate earnings that include a high level of accruals (such as uncollected revenues or deferred expenses) and underestimate the importance of cash flows. Stocks with high accruals tend to be overvalued and deliver lower future returns, and vice versa. Xie (2001) expanded the research by showing that abnormal accruals play a key role in explaining future underperformance. He suggested that these accruals often stem from earnings management practices rather than normal business operations, which further contributes to market mispricing. The results of his study also indicate that the overpricing of total accruals documented by Sloan (1996) is largely due to abnormal accruals. The findings remain robust across five alternative measures of abnormal accruals and even when controlling for major but largely nondiscretionary unusual accruals. This supports the idea that the market overprices the discretionary portion of abnormal accruals arising from management decisions.

The accruals anomaly is a behavioral finance phenomenon where investors systematically overvalue firms with high accruals and undervalue those with low accruals, leading to predictable abnormal returns (Sloan, 1996). This anomaly arises because investors fail to fully appreciate the difference between cash-based earnings and accruals-based earnings, often overreacting to the latter's short-term effects (Dechow, Sloan, & Sweeney, 1995). The accruals anomaly happens when investors focus on net income without distinguishing between the cash and accruals components, and when the market overreacts to reported earnings without considering earnings quality (Richardson et al., 2005).

2.2 Market Efficiency and the Accruals Anomaly in the Egyptian Stock Market:

The Egyptian stock market is classified as an emerging market, exhibiting characteristics distinct from developed markets in terms of market efficiency (Roshdy and Samak, 2025; Elmosalamy and Gamal, 2024). Market efficiency refers to how well prices in a market reflect all available information (Fama, 1970). Empirical studies show that emerging markets like Egypt tend to have lower informational efficiency due to factors such as information asymmetry, limited analyst coverage, and lower investor sophistication (Bekaert & Harvey, 2003).

In the context of the Egyptian market, the accruals anomaly is likely more pronounced due to structural and institutional factors. First, financial reporting and disclosure standards in Egypt are still developing and may lack the rigor seen in more mature markets, which reduces the reliability and transparency of earnings reports (Saleh, 2019). Second, regulatory enforcement is less stringent, allowing greater scope for earnings management and manipulation of accruals (Liu et al., 2023). Third, investor sophistication tends to be lower, and financial literacy is limited, which hinders the ability of many market participants to critically assess earnings quality (Mabkhot & Talat, 2023).

Empirical research on emerging markets supports these assertions. For example, studies on Middle Eastern and North African (MENA) markets demonstrate that accruals anomalies are more persistent in these regions compared to developed markets (Hirshleifer et al., 2012). Although direct research on Egypt is somewhat limited, available evidence suggests similar patterns, indicating that Egyptian investors tend to overreact to accruals-based earnings, resulting in mispricing and exploitable stock return predictability (Marrakchi Chtourou et al., 2001).

To improve market efficiency and reduce the accruals anomaly's impact, Egypt needs to enhance the quality of financial disclosures, strengthen regulatory oversight, and promote investor education. Improved accounting standards aligned with international norms, such as IFRS adoption, can increase transparency and comparability (Ebaid, 2016). Furthermore, increasing analyst coverage and public awareness about earnings quality would help investors make more informed decisions, thereby diminishing mispricing due to accruals.

2.3 The Accruals Anomaly measures:

The accruals anomaly measures refer to the quantitative tools and ratios used to identify and analyze the presence of the accruals anomaly in stock returns. These measures typically help detect how much of a firm's earnings is driven by accruals rather than cash flows, which in turn helps assess earnings quality and potential mispricing. And through a review of previous studies, the measures of the accruals anomaly can be presented as follows:

3. Literature Review and Hypothesis Development

The analysis of accruals behavior and its effects on stock returns has emerged as a crucial focus in modern financial and accounting research. Sloan's seminal study (1996) revealed a perplexing phenomenon, termed the "accruals anomaly," when investors seemingly overrate the persistence of accruals compared to cash flows, leading to systematic mispricing. This discovery contested the conventional Efficient Market Hypothesis and initiated a series of studies aimed at elucidating, testing, and contextualizing the anomaly across other capital markets. Subsequent investigations have analyzed the phenomenon from several perspectives, including information risk, investor behavior, corporate governance, market liquidity, and asset pricing models. These studies encompass both developed and emerging economies, each offering distinct institutional, regulatory, and behavioral perspectives on the impact of accruals on share valuation. Nevertheless, a significant portion of the literature is focused on relatively efficient or semi-efficient markets, resulting in a deficiency in our comprehension of the accruals anomaly's behavior in less efficient contexts marked by substantial information asymmetry, inadequate investor protection, and restricted liquidity. This gap is significant as investor mispricing, arbitrage constraints, and earnings quality may exhibit distinct behaviors in markets characterized by strong information asymmetry, inadequate disclosure rules, minimal institutional participation, and poor market liquidity.

The peculiar inefficiency of the Egyptian stock market affords a distinctive chance to evaluate whether it signifies a universal market inefficiency or one dependent on institutional frameworks and market microstructure. This study reinforces previous findings and elucidates the impact of market inefficiencies, governance quality, and investor sophistication on the accruals anomaly in

emerging markets. This literature review seeks to critically evaluate significant empirical contributions to the accruals anomaly literature, analyze their methodologies and conclusions, and pinpoint areas underexplored markets as Egypt

3.1 Literature Review: Investigating the Accruals Anomaly

Richard Sloan's 1996 landmark study titled "Do Stock Prices Fully Reflect Information in Accruals and Cash Flows about Future Earnings?" is considered the foundational work on the accruals anomaly. Sloan explores whether stock prices fully incorporate information contained in the accruals and cash flow components of current earnings regarding future earnings. The study utilizes a decomposition of earnings into two components—accruals and cash flows—and investigates their respective persistence and influence.

The results demonstrate that accruals are significantly less persistent than cash flows. However, the market appears to "fixate" on total earnings and fails to distinguish between the persistence levels of its components. Consequently, investors overestimate the persistence of accruals, leading to stock mispricing. Firms with high levels of accruals tend to experience future negative abnormal stock returns, while firms with low accruals show positive future returns. This mispricing is especially pronouncing.

Sloan's approach is empirical, relying on regression analysis and Mishkin's (1983) test methodology to evaluate earnings persistence and its pricing implications. The findings support the view that markets are not fully efficient with respect to the components of earnings, contradicting the strong form of the Efficient Market Hypothesis (EMH). Sloan's work opened the door to numerous subsequent investigations into accruals-based anomalies, investor psychology, and earnings management.

Importantly, the study's implications extend beyond asset pricing. It highlights the need for enhanced financial analysis practices that distinguish between accruals and cash flows. For regulators and analysts, the paper suggests that improved disclosures around the quality of earnings could enhance market efficiency.

In summary, Sloan (1996) provides robust evidence that the accruals anomaly stems from investor overreaction to the less persistent accruals component of earnings. It lays the groundwork for understanding how systematic mispricing of accounting information occurs and how it can persist in capital markets.

In Vietnam, Nguyen et al. (2024) investigates the relationship between accruals quality (AQ) and stock returns in the context of an emerging market. It contributes to the growing body of literature questioning the relevance of information risk for asset pricing, particularly in inefficient or weakly efficient markets like Vietnam. The authors employ data from two stock exchanges in Vietnam and adopt a two-stage cross-sectional regression model.

The main research questions include whether accruals quality AQ portfolios are mispriced and whether AQ acts as a priced risk factor. AQ is further decomposed into discretionary and innate components, reflecting manipulated and firm-intrinsic accruals behaviors respectively. While the study finds that AQ explains variations in time-series portfolio returns, especially across size and book-to-market (BM) dimensions, it concludes that AQ is not a priced risk factor in Vietnam.

The study provides several theoretical justifications grounded in earlier models by Easley and O'Hara (2004) and Lambert et al. (2007, 2012), which propose that information risk, when measured as information asymmetry, can influence asset prices. However, these assumptions hinge on at least a semi-strong form of market efficiency. In the Vietnamese market, characterized by retail investor dominance, limited transparency, and regulatory weaknesses, investors may not be aware of the implications of discretionary information.

In conclusion, the study shows that while accruals quality impacts pricing mechanisms, the inefficiencies in the Vietnamese capital market undermine its role as a systematic risk factor. The results emphasize the importance of market context and investor sophistication in determining the pricing power of accounting information. This has direct implications for similar emerging markets like Egypt, where information environments may exhibit comparable characteristics.

Isoyama (2024) presents a novel explanation of the accruals anomaly by focusing on market microstructure and information asymmetry. The central thesis posits that accruals act as proxies for adverse selection risk in asset pricing models. The study introduces an "accruals factor" that represents the systematic risk arising from asymmetric information and demonstrates that this factor is priced in the Japanese market. This accruals factor improves the explanatory power of asset pricing models, such as the Fama-French five- and six-factor models, by accounting for risks related to information asymmetry and adverse selection."

The research distinguishes between discretionary and non-discretionary accruals and constructs factors based on both to test robustness. Findings show that when asymmetric information is pronounced—such as in high-discretion accruals—investors require a risk premium. Using the Fama-French five- and six-factor models and augmenting them with this new accruals risk factor, Isoyama demonstrates improved model performance. The study applies Bayesian frameworks and Hansen-Jagannathan Distance (HJ-Distance) validate the pricing relevance of the accruals factor. The results confirm that incorporating the accruals-based risk factor significantly enhances the explanatory power and statistical fit of asset pricing models, indicating that the accruals anomaly in Japan is not merely a result of mispricing but also reflects systematic risk due to adverse selection."

The research is rooted in the theoretical foundation of Easley and O'Hara's market microstructure theory, which views private and public information dispersion as central to asset pricing. It argues that uninformed investors bear higher exposure to risk due to an inability to interpret private information embedded in accruals, unlike informed investors who can adjust portfolios accordingly. Hence, in equilibrium, firms with high accruals and low information transparency yield lower future returns.

The study makes a significant theoretical contribution by reframing the accruals anomaly as a rational pricing mechanism in the context of asymmetric information rather than pure behavioral mispricing. This is particularly important in emerging or inefficient markets such as Egypt, where similar information disparities exist. The paper also strengthens the argument for developing country-specific pricing factors that capture local market characteristics rather than applying universal models.

Bansal & Ali (2021) –investigate the pricing effects of upward and downward earnings management using accruals in the Indian equity market. The study is among the first to explicitly consider the directionality (positive vs. negative) and endogeneity of earnings management in its assessment of the accruals anomaly. Using a comprehensive dataset of 3,085 firms listed on the Bombay Stock Exchange, the researchers apply the Fama–MacBeth cross-sectional regression methodology alongside univariate and bivariate portfolio sorts. Their empirical design allows them to isolate and examine the distinct market reactions to upward (positive) and downward (negative) earnings management. The findings reveal that investors react asymmetrically: they demand higher expected returns for stocks exhibiting downward earnings management due to perceived risk, whereas they accept lower returns for upward-managed stocks, which are often overvalued. This directional sensitivity provides new insights into how investors price accruals-based earnings manipulations in emerging markets."

The results reveal a significant asymmetry in how the market perceives earnings management. Stocks with negative discretionary accruals (downward manipulation) earn higher future returns, indicating that investors demand a premium for bearing the perceived risk. Conversely, stocks with upward accruals are associated with lower future returns, suggesting overvaluation. These patterns persist after controlling for market, size, value, and momentum effects, strengthening the validity of the findings.

The authors argue that the Indian market context—marked by weaker corporate governance, limited investor protection, and high potential for earnings manipulation—creates fertile ground for such mispricing. Moreover, their incorporation of multiple cross-sectional anomalies (including size and momentum) into the analysis makes this study a comprehensive empirical study.

Overall, the study underscores the importance of distinguishing between types of earnings management when evaluating the accruals anomaly. It also provides strong empirical evidence that market participants react differently to accruals directions, influenced by perceived risk and informational quality. These insights can inform both investors and regulators in emerging markets like Egypt where similar governance and transparency issues may exacerbate the accruals anomaly.

Guo & Maio (2020) – ICAPM Model, the study "ICAPM and the Accruals Anomaly" by Hui Guo and Paulo Maio (2020) introduces a multifactor asset pricing framework to explain the accruals anomaly using the Intertemporal Capital Asset Pricing Model (ICAPM). The authors propose two model versions—ICAPM3 and ICAPM5—that incorporate innovations in the term spread and value spread as hedging factors in addition to the traditional market factor.

Using U.S. data from 1972 to 2013, the researchers test these models on portfolios sorted by various accruals definitions: operating accruals, percent operating accruals, and percent total accruals. The ICAPM3 model explains 43% of cross-sectional returns variation, and the ICAPM5—its scaled version that includes lagged instruments to capture business cycle risk—improves this to 53%. These models outperform traditional models like CAPM and Fama-French in pricing accruals-related anomalies.

A key insight from the study is that accruals are cyclical and tied to firms' investment behavior, which is sensitive to business cycle variables like interest rates and macroeconomic risk. The innovation in term and value spreads captures this sensitivity, making the ICAPM a theoretically and empirically superior approach.

The paper contributes significantly to the risk-based explanation of the accruals anomaly. It also shows that traditional mispricing arguments may overlook systemic macroeconomic influences. This is relevant for markets like Egypt, where cyclical stocks and investment frictions may magnify the accruals anomaly. Hence, developing localized ICAPM versions that reflect macro-structural realities can enhance understanding of anomaly persistence in developing economies.

Cheng and Fang (2023) examine whether stock liquidity moderates the magnitude of the accruals anomaly. The study is grounded in the hypothesis that higher liquidity enhances market efficiency by facilitating information flow, encouraging arbitrage, and attracting sophisticated institutional investors.

Using U.S. data from 1970 to 2011, the researchers find robust evidence that stock liquidity reduces the severity of the accruals anomaly. Specifically, when liquidity is high, the negative return predictability of high-accruals firms weakens or disappears. They employ multiple approaches—regression analysis, portfolio sorts, and Jensen alpha—to validate the robustness of their findings.

Additionally, the study uses the 2001 decimalization rule as a natural experiment in a difference-in-differences framework. Firms experiencing greater increases in liquidity post-decimalization show stronger declines in the accruals anomaly. This causal evidence supports the theory that liquidity mitigates mispricing by lowering transaction costs and encouraging information-based trading.

This study is particularly relevant for emerging markets like Egypt, where stock liquidity tends to be lower, making arbitrage more costly and less effective. It suggests that efforts to improve market microstructure—such as lowering trading frictions and encouraging institutional participation—could directly reduce anomalies like the accruals mispricing.

Overall, the paper integrates asset pricing, market microstructure, and behavioral finance, offering a nuanced explanation that bridges the gap between mispricing theories and market design. Also, the 2020 study by Fedyk, Singer, and Sougiannis titled "The Accruals Anomaly: Accruals Originations, Accruals Reversals, and Resolution of Uncertainty" provides a behavioral explanation for the accruals anomaly. The authors introduce the concept that investors misprice only the originating accruals—those that add uncertainty—while reversing accruals are correctly priced because they resolve past uncertainty. The study develops a novel classification framework to differentiate between originating and reversing accruals ex ante. It shows empirically that investors underestimate the uncertainty associated with originating accruals (e.g., increases in inventory or receivables) but not with reversals (e.g., write-downs). This behavioral bias, termed "overprecision," leads to overreaction and thus mispricing in the case of originating accruals.

The paper combines accounting theory (the inherent uncertainty in accruals estimation), psychology (investor overconfidence), and market behavior (return patterns) to build a compelling explanation. It further validates its findings by showing that excluding reversing accruals from trading strategies improves abnormal returns, highlighting the importance of signal variance in investor interpretation.

Dang and Tran (2019) examine the impact of accruals anomaly on stock return ratio of Vietnam companies from 2008 to 2018. To study the reasons of accruals anomaly in returns and their influence on future returns in the Vietnamese stock market, this study used GLS regression model for testing the impact of accruals anomaly on stock return and T-test for checking the difference between the lowest and the highest portfolio. The study measured accruals anomaly by using

comprehensive measure of Richardson, Sloan, Soliman, and Tuna (2006), and calculated stock return ratio If a company pays dividends (Dt) during the year, the share rate of return will include stock price which will include the final price plus dividends paid per share. The study found accounting distortion plays a more significant role in influencing stock returns than growth factors. Both accounting distortion and growth jointly contribute to explaining how accruals anomalies affect profitability and future returns and total accruals is found to be negatively associated with future operating profitability and stock returns.

Papanastasopoulos (2020) study used the percent accruals measure proposed by Hafzalla et al. (2011) to analyze the accruals anomaly in the UK stock market, this is applied to 2,075 firm-year observations, or 4,025 at each life-cycle stage. A broader measure of accruals that is equal to the difference between net income and free cash flows. After scaling this measure with absolute value of net income, we get percent total accruals. The findings reveal a strong negative relationship between percent accruals and future firm profitability and stock returns. The effect is more pronounced in loss-making firms compared to profitable ones. Additionally, this impact is stronger among micro-cap stocks than small-cap stocks and is not significant in large-cap stocks. The study concludes that earnings fixation plays a key role in the emergence of this anomaly, while limits to arbitrage explain its persistence.

Accruals anomaly has posed a challenge to the efficient market hypothesis, so there are many studies that have examined the accruals anomaly from multiple perspectives. Liu and Liu (2021) tested the role of annual report readability in accruals anomaly, focused on the reason of investor's failure to incorporate accruals information in a timely and unbiased way beyond the original naive investor fixation explanation, and they investigated whether accruals overpricing is more severe when annual reports are less readable. They used five proxies of annual report readability: The Gunning FOX index (FOG for short), the Flesch–Kincaid index (FleKaid for short), the Flesch Reading Ease index (FleEase for short), number of words of annual reports standardized by average assets that are used to standardize accruals and cash flows (NWRS for short) and the Bog index. Accounting data are downloaded from Compustat and stock returns data are downloaded from CRSP. Annual report readability data are downloaded from Professor Li’s and professor Miller’s websites from 1993 to 2017. They found little (significant) evidence of accruals overpricing among high (low) readability

firms. The readability effects are contingent on the level of business complexity and earnings management, and the readability effects are also strong in the presence of low earnings management but minimal in the presence of high earnings management.

The Study of (Kim et al., 2015) examined the relationship between Percent accruals and the accruals anomaly in the Korean stock market, depended on 9399 observations in the period from 1994 to 2010. They noted that previous studies have produced conflicting findings regarding the presence of the accruals anomaly in the Korean companies, and they aimed to address this conflict by applying a different measure of accruals —accruals scaled by earnings (percent accruals)—in comparison to accruals scaled by total assets (traditional accruals). The study found that the accruals anomaly is evident when using percent accruals, but not when using traditional accruals, this study also indicated that when companies are classified according to traditional accruals the lowest accruals decile includes firms with weak cash flows, which lead to diminished returns that cancel out the abnormal returns of the accruals-based trading strategy.

Arif and Sul (2024) mentioned that economists have noted a link between stock price bubbles and excessive corporate investment. They examined the relationship between stock price bubbles and corporate overinvestment by analyzing data from 49 countries, focuses on net operating asset (NOA) accruals as an early indicator of bubbles. The study presented five key findings confirming that high NOA accruals are associated with subsequent price crashes, lower returns, over-optimistic investor expectations, and disappointing earnings. These indicators are especially accurate after price run-ups. The results show that accounting information can help predict market bubbles and reveal inefficiencies at the industry level.

Yoon and Son (2014) investigated the persistence of abnormal hedge portfolio returns that exclude certain types of risks, focusing on the effects of the business cycle and firm size. Using data from the KOSPI and KOSDAQ markets during the period from July 1991 to December 2013 (270 months), firms were classified by size and economic periods divided into expansions and recessions. The study identified four recurring anomalies across all groups, but only the returns related to net stock issuance were statistically significant across all periods and sizes.

The results suggest that net stock issuance is a good indicator of expected book equity growth, especially during recessions, providing valuable insights for investors and researchers on the relationship between expected growth and business cycle risk.

Kho and Kim (2007) investigated the presence of the accruals anomaly in Korean stock markets, compared to observations in the U.S market. They also examined the relationship between this anomaly and a potential risk factor that could be incorporated into asset pricing models, during the period from 1987 to 2005. Accruals are typically measured as the difference between accounting earnings and operating cash flows and are considered an important indicator of earnings quality and management. Sloan's (1996) study found that firms with high operating accruals tend to earn lower stock returns compared to those with low accruals. Since then, multiple studies have confirmed that this anomaly exists in other global stock markets as well.

The accruals anomaly is mainly explained by two theories. The first is the risk hypothesis, which suggests that the anomaly reflects compensation for a risk factor not accounted for in traditional asset pricing models. The second is the mispricing hypothesis, based on behavioral finance, which attributes the anomaly to market inefficiency and investor biases. According to this view, investors tend to be overly optimistic about firms with high accruals and overly pessimistic about those with low accruals, leading to inaccurate pricing. They found that firms with low accruals significantly outperform those with high accruals up to 16% annually over a three-year period when using the total accruals measure, and by about 10% annually over one year when using the net operating assets measure. These findings differ from the study by Hiershleifer et al. (2004) in the U.S. market, which found that the net operating asset measure yields higher abnormal returns than the total accruals measure.

Sloan (1996) explored whether stock prices reflect information about future earnings contained in the accruals and cash flow components of current earnings. Sloan mentioned that the stock price tests require at least one year of future returns data. Using financial statement data for the 30 years beginning in 1962 and ending in 1991, with 40,679 firm-year observations. Sloan use the operating income after depreciation, the cash flow component of earnings is measured as the difference between earnings and the accruals component of earnings. Finally,

the accruals component of earnings is computed using information from the balance sheet and income statement, as is common in the earnings management literature (Dechow et al. 1995). The results indicate that the persistence of earnings performance depends on the proportion between these two components. However, investors appear to place excessive emphasis on the overall earnings figure, overlooking valuable information in the accruals and cash flow components until it actually impacts future earnings.

This behavioral framing enhances prior literature that largely attributes the accruals anomaly to either rational risk factors or broad mispricing. The study emphasizes the nuanced role of cognitive biases and their asymmetric effect on different types of accounting entries.

For a markets like Egypt, where investor education and sophistication may vary widely, such behavioral patterns are likely amplified. Hence, distinguishing between accruals components can help investors and policymakers design better forecasting tools and regulatory frameworks that minimize mispricing driven by misinterpreted uncertainty.

3.2 Literature Review Summary: Investigating the Accruals Anomaly in Egypt

This section reviews several empirical studies on the accruals anomaly across different countries and methodologies. The review identifies gaps in the literature relevant to investigating the accruals anomaly in the Egyptian market, notably its persistence in inefficient markets, the role of stock liquidity, information asymmetry, earnings management, and asset pricing models. Below is a summary of key studies.

Study	Country	Period	Methodology	Model Used	Key Variables	Findings
Sloan (1996)	USA	1962–1991	Regression, Mishkin test	None specified	Accruals, Cash flows	Accruals less persistent than cash flows; investors overestimate accruals persistence, causing mispricing.
Nguyen et al. (2024)	Vietnam	Not specified	Cross-sectional model (Core et al., 2008)	AQ (accruals quality factor)	Discretionary & innate AQ	AQ explains portfolio returns but is not a priced risk factor in Vietnam's inefficient market.
Isoyama (2024)	Japan	Not specified	Asset pricing, Fama-French 5 & 6-factor	Accruals factor (systematic risk proxy)	Discretionary & non-discretionary accruals	Accruals proxy adverse selection risk; priced factor improving model accuracy.
Bansal & Ali (2021)	India	Not specified	Fama–MacBeth regression, portfolio sorts	Modified Jones model	Positive & negative earnings management	Market prices downward accruals with a premium; different risk perceptions of EM directions.
Fedyk et al. (2020)	USA	Not specified	Behavioral test of originations vs. reversals	Novel accruals classification	Originating vs. reversing accruals	Mispricing only in originating accruals due to underestimated uncertainty (overprecision).
Guo & Maio (2020)	USA	1972–2013	Multifactor ICAPM	ICAPM3, ICAPM5	Operating, total, percent accruals	ICAPM explains anomaly with TERM and value spreads; related to business cycle risk.
Cheng & Fang (2023)	USA	1970–2011	Regression, DiD, Jensen Alpha	Liquidity regression	Stock liquidity, accruals	Liquidity reduces anomaly; high liquidity dampens mispricing via better arbitrage.

Dang & Tran (2019)	Vietnam	2008–2018	GLS regression, T-test	Richardson et al. (2006) model	Accruals anomaly, Stock return	Accruals negatively associated with future profitability and stock returns
Papanastasopoulos (2020)	UK	Not specified	Regression analysis	Percent accruals (Hafzalla et al., 2011)	Net income, Free cash flows	Negative link stronger in micro-cap and loss-making firms
Liu & Liu (2021)	USA	1993–2017	Textual analysis with 5 readability indices	Gunning FOG, Flesch-Kincaid, NWRS	Report readability, Accruals	Low readability firms show more severe accruals mispricing
Kim et al. (2015)	Korea	1994–2010	Panel regression	Percent accruals vs Traditional accruals	Accruals scaled by earnings/assets	Anomaly evident with percent accruals, not traditional
Arif & Sul (2024)	Global	Not specified	Cross-country analysis	Net Operating Assets (NOA)	NOA accruals, Bubbles	High NOA linked to crashes and over-optimism
Yoon & Son (2014)	Korea	1991–2013	Abnormal hedge portfolio returns	Business cycles classification	Net stock issuance, firm size	Net stock issuance predicts equity growth in recessions
Kho & Kim (2007)	Korea	1987–2005	Asset pricing tests	Total accruals, NOA	Accruals, Returns	Low accruals firms outperform; anomaly supports mispricing theory

Despite the extensive research on the accruals anomaly, gaps remain, particularly in understanding the phenomenon in emerging, inefficient markets like Egypt. Few studies directly test the anomaly using Egyptian data. Moreover, while several studies highlight factors such as earnings management, information risk, or liquidity, most are focused on developed or semi-efficient markets. Egypt's unique capital market structure, characterized by low liquidity, limited institutional investors, and information asymmetries, provides a distinct context where existing models may not fully apply. Thus, the proposed study aims to fill this research gap by empirically investigating the accruals anomaly in Egypt, evaluating the role of market inefficiency and identifying the factors that moderate or exacerbate the anomaly under local conditions.

3.3 Commentary and Identified Research Gap

The body of literature reviewed offers substantial insight into the accruals anomaly and its underlying causes. Sloan (1996) first identified the anomaly as a function of investors' tendency to overvalue the accruals component of earnings due to its lower persistence compared to cash flows. Subsequent studies have expanded on this finding by introducing a variety of perspectives, including information risk (Nguyen et al., 2024), market microstructure (Isoyama, 2024), directionality of earnings management (Bansal & Ali, 2021), macroeconomic risk via ICAPM (Guo & Maio, 2020), market liquidity (Cheng & Fang, 2023), and behavioral biases such as overprecision (Fedyk et al., 2020).

While these studies provide robust empirical and theoretical explanations for the accruals anomaly, a common limitation persists: the majority of these investigations are concentrated in relatively efficient or semi-efficient capital markets such as the United States, Japan, and India. These markets—despite differences in regulatory and governance standards—offer a minimum level of transparency, institutional investor presence, and arbitrage efficiency. In contrast, the Egyptian capital market represents a unique setting characterized by low liquidity, a dominance of retail investors, limited institutional participation, and pervasive information asymmetry.

Furthermore, the reviewed studies seldom explore how the interplay between market inefficiency and accounting quality impacts the accruals anomaly. For example, although Nguyen et al. (2024) examine Vietnam as an emerging market, their conclusion emphasizes the lack of pricing power in AQ factors without directly addressing broader structural inefficiencies. Similarly, Cheng & Fang (2023) provide evidence that high liquidity mitigates the anomaly, implicitly suggesting that in low-liquidity settings such as Egypt, the anomaly may be more severe.

This lack of context-specific research creates a clear gap. The Egyptian market offers a prime opportunity to examine whether the accruals anomaly persists and intensifies under extreme informational frictions and investor limitations. Such an investigation would not only contribute to the international accounting literature but also provide policy-relevant insights for regulators aiming to enhance market efficiency through disclosure reform and investor education.

Although the accruals anomaly has been widely investigated in developed and semi-efficient markets, limited research exists in highly inefficient frontier markets such as Egypt. Prior studies tend to focus on markets with higher institutional investor presence, stronger enforcement of disclosure, and relatively greater transparency. In contrast, Egypt represents a unique environment characterized by low liquidity, dominance of retail investors, weaker enforcement of financial reporting standards, and persistent information asymmetry. This lack of targeted research in Egypt leaves an important gap in our understanding of how the accruals anomaly operates in contexts where market inefficiency and low investor sophistication are most pronounced. Therefore, the present study contributes by empirically testing whether accruals are systematically mispriced in such a distinct institutional and market setting, addressing a significant gap in the literature.

Therefore, this study aims to empirically test the accruals anomaly in Egypt, examining the impact of accruals quality, market inefficiency, and earnings management in an under-researched, high-friction environment. This addresses a vital and underexplored niche in the global discussion of financial reporting anomalies.

3.4 Hypothesis Development

The accruals anomaly refers to the documented tendency for firms with high accruals components in earnings to generate lower subsequent stock returns than those with low accruals. This phenomenon presents a contradiction to the semi-strong form of the Efficient Market Hypothesis (EMH), which asserts that all publicly available information, including accruals, should be fully reflected in stock prices. The persistence of this anomaly in developed and emerging markets has led to competing explanations—primarily the risk-based hypothesis, which attributes the anomaly to compensation for unobserved risks, and the mispricing hypothesis, rooted in behavioral finance, which suggests that investors systematically misinterpret the persistence of accruals.

Building on foundational work by Sloan (1996), who decomposed earnings into cash flows and accruals and showed that markets overestimate the persistence of accruals, subsequent studies have explored different accruals measures and market contexts. For instance, Kim et al. (2015) and Papanastasopoulos (2020) found that percent accruals, which scale the difference between net income and free cash flows by the absolute value of net income, yield stronger predictive

power than traditional total accruals scaled by total assets. Liu and Liu (2021) also emphasize the role of non-financial factors, such as report readability, in amplifying the accruals anomaly.

In emerging markets like Egypt—characterized by limited investor sophistication, weak enforcement of financial disclosure, and limited analyst coverage—the accruals anomaly may be more pronounced. Therefore, this study extends the international literature by testing the existence and strength of the accruals anomaly in the Egyptian Stock Exchange using total accruals measures.

Based on the reviewed literature and the theoretical framework, the following hypotheses are proposed:

H_1: There is a significant accruals anomaly in the Egyptian stock market, with high-accruals firms underperforming low-accruals firms.

Study hypotheses are empirically tested using a panel dataset of Egyptian firms from year (2013 to 2023), using multivariate regression techniques to evaluate the robustness and explanatory power of accruals measures in predicting future stock returns.

$$TQ_{it} = \beta_0 + \beta_1 ACCR_{it} + \beta_2 SIZE_{it} + \beta_3 MTB_{it} + \varepsilon_{it}$$

Where:
- TQ_{it+1}= reflects Tobin's Q measured by market expectations of future performance.
- $ACCR_{it}$ = Total accruals (scaled by assets)
- $SIZE_{it}$ = Firm size (log of market cap or assets)
- MTB_{it} = Market-to-book ratio (controls for growth)

4. Research Design

To test whether firms with high accruals earn significantly lower future Tobin's Q than those with low accruals, indicating the presence of an accruals's anomaly in the Egyptian stock market. The study adopts the Quantitative, empirical, longitudinal approaches by using Portfolio Sorting Approach.

4.1 Data Sample

The study utilizes a sample of 100 non-financial firms listed on the Egyptian Stock Exchange (EGX) over the period from ٢٠١٣ to ٢٠٢٣. These firms were selected based on the availability of relatively complete and consistent annual financial reports, which enabled the accurate calculation of accruals and related financial indicators. The selected companies are considered among the most active and transparent in the Egyptian market, making them particularly suitable for empirical testing of the accruals anomaly.

The primary criterion for selection was the accessibility and reliability of financial data, as many firms listed on the EGX—particularly small and medium enterprises—do not consistently publish detailed disclosures. By focusing on firms with full and verifiable data across the study period, this research ensures data integrity, minimizes the impact of missing values, and enhances the overall robustness of the statistical analyses.

The appropriateness of the selected sample is further supported by the following academic justifications:

1. **Data Completeness and Quality**: The sampled firms publish comprehensive, audited financial statements, allowing for precise computation of accruals-based metrics and comparability across years.
2. **Market Activity**: These companies are among the most actively traded on the EGX, suggesting a minimum threshold of investor attention and market responsiveness to financial disclosures.
3. **Homogeneity and Control**: The sample exhibits relative homogeneity in firm size and sector classification, which reduces cross-sectional variance and strengthens the reliability of inferences.
4. **Addressing Research Gap**: Unlike prior studies that primarily focused on EGX 30 or sector-specific samples, this selection offers a broader and underexplored segment of the Egyptian market, contributing new empirical evidence to the local literature on market anomalies.
5. **Relevance of the Time Frame**: The period from 2014 to 2022 encompasses significant macroeconomic events—such as the COVID-19 pandemic, inflationary shocks, and currency fluctuations—thus providing a dynamic context for testing the sensitivity of accruals to changing economic conditions without being confounded by major regulatory changes.

In summary, the selected sample of 100 firms, from 2013 to 2023, offers a sound empirical foundation to test the accruals anomaly in an emerging market environment characterized by informational inefficiencies and limited investor sophistication.

4.2 Research Model

The study uses two models to investigate the accruals anomaly in Egypt;

1) Tobin's Q Difference Model; to compare sample firm according to Tobin's Q

To compare Tobin's Q of high- and low-accruals firms:

$$\mathbf{H_1: TQ_t\_LowAccruals - TQ_t\_HighAccruals > 0}$$

Where:
- TQ_t_LowAccruals = TQ_t of low-accruals portfolio
- TQ_t_ HighAccruals = TQ_t of high-accruals portfolio

2) Regression Model (Cross-Sectional); to investigate the accruals anomaly across study sample

$$\mathbf{TQ_t = \beta_0 + \beta_1\ ACCR_{it} + \beta_2\ FSIZE_{it} + \beta_3\ MTBit + \varepsilon_{it}}$$

Where:
- TQ_t = Tobin's Q of firm i in year t
- $ACCR_{it}$ = Total accruals (scaled by assets)
- $FSIZE_{it}$ = Firm size (log of assets)
- MTBit = Market-to-book ratio (controls for growth)
- ε_{it} = error term

Expected sign:
- $\beta_1 < 0$: High accruals → lower future Tobin's Q

Table (1) shows the variables descriptions and expected relationship sign with justifications;

Table (1) variables descriptions, expected relationship sign, and justifications

Variable	Description	Expected Sign	Justification
$ACCR_{it}$	Total Accruals (scaled by total assets)	Negative (-)	High accruals often signal lower earnings quality or earnings manipulation, reducing future firm value.
$FSIZE_{it}$	Firm Size (log of total assets)	Positive (+)	Larger firms tend to be more transparent and stable, positively influencing firm value.
MTBit	Market-to-Book Ratio (control for growth)	Positive (+)	Higher MTB suggests growth opportunities, which typically increase firm value.

4.3 Statistical Analysis and Empirical Results

4.3.1 Descriptive Statistics

Table (2) displays the descriptive statistics for the primary variables utilized in the analysis. This data offers a summary of the distribution, central tendency, and variability within the study sample.

Table (2) Descriptive Statistics

Item	Mean	Std. Deviation	N
Tobin's Q	1.143	0.96	873
Fsize	20.5	1.56	873
MTB(CON)	1.96	13.85	873
T_Acc_Assets	.0066	.11	873

The descriptive statistics show that Tobin's Q has a mean of 1.14 with a standard deviation of 0.97, indicating moderate variation in firm valuation. Firm size (Fsize) averages 20.56, while the market-to-book ratio (MTB) exhibits high variability (mean = 1.96, SD = 13.85), suggesting outliers or extreme values in the sample. Total accruals scaled by assets (T_Acc_Assets) have a mean close to zero (0.0066), consistent with expectations in accruals studies.

4.3.2 Correlation Analysis

The Pearson correlation analysis in Table (3) indicates a weak negative association between Tobin's Q and total accruals ($r = -0.100$, $p < 0.01$), implying that increased accruals are slightly linked to diminished market valuation. A

moderate positive link exists between MTB and Tobin's Q ($r = 0.201$, $p < 0.001$), however no significant relationships are observed between company size and the other variables. The correlations are often modest, suggesting an absence of significant multicollinearity among the independent variables.

Table (3) Correlation results

Correlations					
		Tobin's Q	**Fsize**	**MTB(CON)**	**T_Acc_Assets**
Pearson Correlation	Tobin's Q	1.000	-.008	.201	-.100
	Fsize	-.008	1.000	-.007	.012
	MTB(CON)	.201	-.007	1.000	-.101
	T_Acc_Assets	-.100	.012	-.101	1.000
Sig. (1-tailed)	Tobin's Q	.	.411	.000	.002
	Fsize	.411	.	.417	.365
	MTB(CON)	.000	.417	.	.001
	T_Acc_Assets	.002	.365	.001	.
N	Tobin's Q	873	873	873	873
	Fsize	873	873	873	873
	MTB(CON)	873	873	873	873
	T_Acc_Assets	873	873	873	873

4.3.3. Regression Model Results

A multiple linear regression was performed to examine the impact of accruals, firm size, and market-to-book ratio on Tobin's Q. Table (4 and 5) demonstrates that the model is statistically significant ($F = 14.23$, $p < 0.001$), with a R^2 value of 0.047, indicating that about 4.7% of the variance in Tobin's Q is elucidated by the independent variables.

Table (4) ANOVA Test Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.337	3	12.779	14.230	.000[b]
	Residual	780.394	869	.898		
	Total	818.730	872			

a. Dependent Variable: Tobin's Q

b. Predictors: (Constant), T_Acc_Assets, Fsize, MTB(CON)

Table (5) Multiple Linear Regression Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.216[a]	.047	.044	.947	1.558

a. Predictors: (Constant), T_Acc_Assets, Fsize, MTB(CON)
b. Dependent Variable: Tobin's Q

Table (6) Multiple Linear Regression Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.190	.423		2.813	.005		
Fsize	-.003	.021	-.005	-.161	.872	1.000	1.000
MTB(CON)	.013	.002	.193	5.793	.000	.990	1.010
T_Acc_Assets	-.690	.286	-.080	-2.414	.016	.990	1.010

a. Dependent Variable: Tobin's Q

Table (6) shows that total accruals scaled by assets (T_Acc_Assets) significantly negatively impacts Tobin's Q (β = -0.690, p = 0.016), so offering empirical evidence for the accruals anomaly in the Egyptian stock market. This outcome suggests that companies with elevated accruals tend to demonstrate diminished market valuation in future periods. Conversely, firm size does not significantly affect Tobin's Q (p = 0.872), although MTB exerts a substantial positive influence (β = 0.013, p < 0.001), affirming its status as a crucial predictor of firm value. Furthermore, The Durbin-Watson statistic in Table (5) is (1.558) suggests no severe autocorrelation in the residuals. Variance Inflation Factor (VIF) values, in Table (6), for all variables are approximately 1, confirming the absence of multicollinearity.

5. Results and Discussion

5.1 Hypothesis Results

Tests of study hypothesis are summarized in Table (6) based on the empirical analysis. Each hypothesis is evaluated against the statistical findings to determine its acceptance or rejection.

Table (6) Hypothesis Results

Hypothesis	Statement	Empirical Result	Decision
H_1	There is a significant accruals anomaly in the Egyptian stock market, with high-accruals firms underperforming low-accruals firms.	Accruals have a significant negative effect on Tobin's Q ($\beta = -0.690$, $p = 0.016$).	Accepted

The regression analysis reveals a statistically significant negative relationship between total accruals (scaled by assets) and Tobin's Q ($\beta = -0.690$, $p = 0.016$). This result supports H_1, indicating that firms with higher accruals levels tend to exhibit lower future market valuation compared to their low-accruals counterparts. Additionally, the descriptive statistics show that the mean Tobin's Q is slightly lower in the high-accruals group relative to the low-accruals group. These findings are consistent with prior international studies on the accruals anomaly, suggesting that accounting accruals are mispriced by investors, thus affecting firm valuation.

5.2 Discussion

The results reinforce the notion that accruals-based financial information is not fully reflected in stock prices within the Egyptian context, highlighting a behavioral mispricing pattern consistent with the accruals anomaly. This mispricing may stem from investors' limited ability or willingness to differentiate between accruals and cash components of earnings, a limitation amplified in less mature markets. The fact that market-to-book ratio (MTB) remains the only significant control variable further illustrates the dominant role of market expectations over fundamental indicators such as firm size.

From a policy perspective, these findings highlight the importance of improving disclosure quality and investor education to enhance market efficiency. Firms, regulators, and analysts may benefit from emphasizing cash-based performance

metrics and enhancing transparency regarding accruals components in financial statements.

The empirical results confirm a statistically significant negative relationship between accruals and Tobin's Q, thereby supporting the existence of the accruals anomaly in Egypt. This implies that investors in the Egyptian market tend to overvalue accruals-based earnings and undervalue cash flow information, resulting in future declines in firm valuation. The limited explanatory power of the regression model (R^2 = 0.047) further highlights the inefficiency of the Egyptian market. Specifically, it suggests that traditional firm-level fundamentals do not fully capture stock valuation patterns, leaving greater room for behavioral biases and mispricing. The findings align with international evidence while underscoring that market inefficiency and weak disclosure frameworks amplify the anomaly in Egypt. From a policy perspective, the results emphasize the need for improved transparency in financial reporting, stronger regulatory oversight, and enhanced investor education to mitigate the persistence of such mispricing.

5.3 Study Limitations and Future Research

The study offers significant insights on the accruals anomaly in the Egyptian stock market, although many limitations must be recognized. The model has little explanatory power (R^2 = 0.047), indicating the necessity to include supplementary factors such as profitability, leverage, or ownership concentration; yet, the study emphasized parsimony and concentrated on variables most pertinent to the research purpose. The analysis is confined to non-financial enterprises listed on the EGX, which constrains the generalizability of the findings to the wider market. The analysis utilizes total accruals scaled by assets, which may inadequately reflect the complexities of earnings manipulation; this metric was chosen for its simplicity, data accessibility, and consistency with existing studies. The nine-year period (2014–2022), although containing significant economic events, may not accurately represent long-term trends or structural changes; it was chosen to maintain data consistency while include pivotal moments such as COVID-19 and macroeconomic fluctuations. To mitigate these constraints, subsequent research may enhance the model by incorporating a wider array of control variables, utilizing more sophisticated accruals models (e.g., discretionary accruals), and performing comparison

analyses across firm sizes, sectors, or geographical markets. These guidelines would strengthen the robustness and external validity of findings about accruals mispricing in emerging economies.

Furthermore, excluding industry type as a control variable is another limitation for the study. Including firm industry type as an additional control variable in the Egyptian setting presents methodological and practical limitations. First, the Egyptian Stock Exchange is relatively small and fragmented, with industry classifications that are often inconsistent or overlapping. Many firms engage in diversified operations that do not fit neatly into a single sector, thereby reducing the validity of industry-based controls. Second, the focus of this study is on market-wide inefficiency rather than sector-specific effects. Introducing industry classification could dilute the main objective of testing whether accruals are mispriced in an overall inefficient market environment. Third, sample size constraints—given the already limited pool of consistently reporting firms—make disaggregation by industry statistically challenging without compromising robustness. For these reasons, the analysis prioritizes parsimony and consistency with prior literature in emerging market contexts, while acknowledging that future studies could explore sector-level heterogeneity once more reliable classifications and larger datasets become available.

2. Summary and Conclusion

In summary, the empirical evidence supports the existence of an accruals anomaly in the Egyptian stock market, where high-accruals firms underperform low-accruals firms in terms of Tobin's Q. The inefficiency of the market appears to magnify this effect, as evidenced by weak overall model fit and limited influence of conventional firm characteristics. These results underscore the need for stronger financial reporting standards and improved investor awareness to mitigate mispricing in emerging capital markets.

References

Arif, S., & Sul, E. (2024). Does accounting information identify bubbles for Fama? Evidence from accruals. *Journal of Accounting and Economics*, *78*(2-3), 101711.

Bansal, M., & Ali, A. (2021). Differential impact of earnings management on the accruals anomaly. *Journal of Asset Management*, *22*(7), 559-572.

Bekaert, G., & Harvey, C. R. (2003). Emerging markets finance. *Journal of Empirical Finance*, 10(1-2), 3-55.

Dang, H. N., & Tran, D. M. (2019). Relationship between accruals anomaly and stock return: The case of Vietnam. *The Journal of Asian Finance, Economics and Business*, *6*(4), 19-26.

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193-225.

Ebaid, I. E. S. (2016). International accounting standards and accounting quality in code-law countries: The case of Egypt. *Journal of Financial Regulation and Compliance*, *24*(1), 41-59.

ElMosalamy, D., & Gamal, N. (2024). Efficient market hypothesis revisited: Evidence from Egypt. *MSA–Management Science Journal, 3*(2), 1–27.

Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, 25(2), 383-417.

Fedyk, T., Singer, Z., & Sougiannis, T. (2020). The accruals anomaly: Accruals originations, accruals reversals, and resolution of uncertainty. *Contemporary Accounting Research*, *37*(2), 885-916.

Guo, H., & Maio, P. (2020). ICAPM and the Accruals Anomaly. *Quarterly Journal of Finance*, *10*(03).

Hirshleifer, D., Hou, K., & Teoh, S. H. (2012). The accruals anomaly: risk or mispricing? *Management Science*, *58*(2), 320-335.

Hribar, P., & Collins, D. W. (2002). Errors in estimating accruals: Implications for empirical research. *Journal of Accounting research*, *40*(1), 105-134.

Isoyama, H. (2024). Accruals anomalies could be explained by the adverse selection risk induced by the information structure: the case of the Japanese securities market. *Cogent Economics & Finance*, *12*(1), 2318128.

Kho, B., & Kim, J. (2007). Does the accruals anomaly reflect a risk factor? The case of the Korean stock market. *Asia-Pacific Journal of Financial Studies*, *36*(3), 425-461.

Kim, Y. J., Kim, J. H., Kwon, S., & Lee, S. J. (2015). Percent accruals and the accruals anomaly: Korean evidence. *Pacific-Basin Finance Journal*, *35*, 340-366.

Liu, M., & Liu, Z. (2021). Does annual report readability explain the accruals anomaly? *Asian Review of Accounting*, *29*(3), 307-331.

Liu, T., Abdelbaky, A., Elamer, A. A., & Elmahgoub, M. (2023). Real earnings management and ESG disclosure in emerging markets: The moderating effect of managerial ownership from a social norm perspective. *Heliyon*, *9*(12).

Mabkhot, H., & Talat, S. (2023). Impact of Social factors, Self-control, and Financial Education on Financial Literacy and Financial Saving Behaviour among University Students in Saudi Arabia. *Eurasian Journal of Educational Research (EJER)*, (106).

Marrakchi Chtourou, S., Bedard, J., & Courteau, L. (2001). Corporate governance and earnings management. *Available at SSRN 275053*.

Nguyen, T. N. L., Nguyen, M., Nguyen, V. D., & Vo, X. V. V. (2024). Accruals Quality, Stock Returns and Information Risk: Evidence from Vietnam. *Journal of Economic Development*, *49*(2), 53-80.

Papanastasopoulos, G. (2020). Percent accruals and the accruals anomaly: evidence from the UK. *Accounting Forum*, *44*(3), 287–310. https://doi.org/10.1080/01559982.2020.1736758.

Richardson, S. A., Sloan, R. G., Soliman, M. T., & Tuna, I. (2005). Accruals reliability, earnings persistence and stock prices. *Journal of accounting and economics*, *39*(3), 437-485.

Rushdy, A., & Samak, N. (2025). Examining Market Quality on the Egyptian Exchange (EGX): An Intraday Liquidity Analysis. *Journal of Risk and Financial Management,* 18(1), 32. https://doi.org/10.3390/jrfm18010032.

Saleh, M. (2019). *Evaluation of the Impact of Financial Sector Reforms on Stock Market Efficiency: The Case of Egypt* (Doctoral dissertation, Cardiff Metropolitan University).

Sloan, R. G. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *The Accounting Review*, 289-315.

Xie, H. (2001). The mispricing of abnormal accruals. *The Accounting Review*, *76*(3), 357-373.

Yoon, B. H., & Son, S. H. (2014). Cash Flow Anomalies Associated with Business Conditions in Korean Stock Market. *Journal of Distribution Science*, *12*(5), 61-69.