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# THEORY AND APPLICATION OF CRUDE PALM OIL FUTURES (FCPO): FROM THE PERSPECTIVE OF SHARIAH

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***Abstract*****:** *Commodity futures markets play a critical role in modern financial systems by facilitating risk management, enhancing price discovery and improving market efficiency. This study examines the theory and application of the Crude Palm Oil Futures (FCPO) market in Malaysia, with the aim of bridging the gap between theoretical constructs and real-world market practices. While existing literature predominantly focuses on isolated aspects such as price discovery, hedging effectiveness and volatility, limited attention has been given to the integrated analysis of how the FCPO market operates in practice as a Shariah-compliant instrument. To address this gap, the study adopts a qualitative research design based on doctrinal and content analysis, drawing on academic literature, institutional documents and industry reports. The findings reveal that the FCPO market operates within a highly structured institutional framework governed by Bursa Malaysia and Bursa Malaysia Derivatives, incorporating key mechanisms such as standardized contracts, centralized clearing, margining systems and daily mark-to-market settlement as a Shariah-compliant instrument. These mechanisms play a critical role in ensuring market integrity, reducing counterparty risk, facilitating continuous trading and avoiding all the prohibited elements in Shariah. Overall, the study concludes that the FCPO market operates as a multi-functional system in which hedging, price discovery and speculative activities interact in a complex and evolving manner. By providing an integrated operational analysis, this study contributes to a deeper understanding of Shariah-compliant commodity futures markets and offers a foundation for future empirical research.*

*Keywords*: Theory, Application, Crude Palm Oil Futures (FCPO), Shariah-Compliant Crude Palm Oil Futures, Islamic Finance

## 1. Introduction

Commodity futures markets play a critical role in modern financial systems by facilitating risk management, enhancing price discovery, and improving market efficiency. Among these, agricultural commodity derivatives have gained particular importance due to their direct linkage with real economic activities and global trade. In the Malaysian context, the Crude Palm Oil Futures (FCPO) market represents one of the most prominent and actively traded commodity futures markets, reflecting the country's position as a leading producer and exporter of palm oil. Traded on Bursa Malaysia through Bursa Malaysia Derivatives, FCPO serves as a key platform for market participants to manage price risks associated with fluctuations in crude palm oil prices.

Theoretically, futures markets are designed to enable the transfer of price risk from hedgers to speculators while simultaneously facilitating the efficient dissemination of information through the price discovery process. These functions are supported by a structured operational framework involving standardized contracts, margining systems, centralized clearing, and daily mark-to-market settlement. Such mechanisms are intended to ensure transparency, reduce counterparty risk, and promote liquidity within the market. However, the extent to which these theoretical functions are realized in practice remains subject to empirical and operational considerations.

Despite the economic importance of the FCPO market, its operation has also attracted considerable debate from the Shariah perspective, particularly in relation to speculative trading, leverage, and the issue of ownership in futures transactions. Given Malaysia's dual financial system and its position as a global hub for Islamic finance, the operational mechanisms of FCPO have been examined by the Shariah Advisory Council (SAC) of Bank Negara Malaysia and the SAC of Securities Commission Malaysia. These discussions highlight the importance of evaluating futures market operations not only from an economic and institutional perspective but also in relation to Shariah principles governing commercial transactions.

Considering these considerations, this study aims to provide a comprehensive analysis of the operational structure of the FCPO market by integrating theoretical perspectives with practical insights. The remainder of this paper is structured as follows. Section 2 reviews the relevant literature on futures markets and FCPO. Section 3 outlines the Shariah perspective on FCPO and Section 4 discusses the research methodology. Section 5 presents a detailed operational analysis of the FCPO market. Section 6 discusses the findings in relation to theoretical and empirical perspectives, and Section 7 concludes the study.

## 2. Literature Review

### 2.1 Overview of Futures Markets and Operational Foundations

The development of futures markets has long been associated with the need to manage price uncertainty and facilitate efficient price formation. Early theoretical foundations, particularly those introduced by Working (1949), emphasize that futures markets serve as mechanisms for transferring risk from hedgers to speculators. This perspective is further reinforced by Kaldor (1939), who argue that speculation plays a necessary and stabilizing role in commodity markets by providing liquidity and absorbing risk.

From an operational standpoint, futures contracts are standardized agreements traded on organized exchanges, where mechanisms such as margin requirements, daily mark-to-market settlement, and clearinghouse guarantees ensure market integrity and reduce counterparty risk. These structural features distinguish futures markets from forward contracts and contribute to their widespread adoption in commodity trading. According to Fama and French (1987), commodity futures prices are influenced by storage costs, interest rates, and expectations of future supply and demand, highlighting the complexity of price formation within these markets.

### 2.2 Operational Structure of the FCPO Market

In the Malaysian context, the Crude Palm Oil Futures (FCPO) traded on Bursa Malaysia represents one of the most actively traded commodity derivatives in the region. The operational framework of FCPO closely follows the conventional futures market structure, incorporating standardized contract specifications, centralized clearing, and regulated trading procedures.

Empirical studies indicate that the FCPO market plays a significant role in facilitating trading activities and risk management for participants in the palm oil industry. However, its operational dynamics are not solely driven by hedging motives. For instance, Ahmad (2015) finds that the FCPO market contributes to price discovery, indicating that futures prices often incorporate new information more rapidly than spot prices. This suggests that the operational function of FCPO extends beyond risk transfer to include information aggregation.

Similarly, Ong et al. (2012) examine the hedging effectiveness of FCPO and report that while futures contracts provide some degree of risk reduction, the effectiveness is not consistently strong across different market conditions. This raises questions about the extent to which FCPO fulfils its primary operational objective as a hedging instrument.

## 2.3 Price Discovery and Market Efficiency

A central aspect of futures market operation is the price discovery process, which refers to the ability of futures prices to reflect new information about underlying assets. Foundational studies by Garbade and Silber (1983) and Hasbrouck (1995) establish that futures markets often lead spot markets in incorporating information due to their lower transaction costs and higher leverage.

This theoretical proposition is supported in the FCPO context. Ahmad (2015) demonstrates that FCPO futures prices exhibit a leading role relative to spot prices, reinforcing the argument that futures markets serve as primary venues for information dissemination. The implication is that the operational significance of FCPO lies not only in facilitating trade but also in enhancing market efficiency.

However, the extent of efficiency remains subject to debate. Studies such as Yang et al. (2001) highlight that the lead–lag relationship between futures and spot markets may vary depending on market conditions, liquidity, and external shocks. This suggests that while FCPO contributes to price discovery, its effectiveness may not be uniform across time.

## 2.4 Trading Activity and Volatility Dynamics

Another critical dimension of futures market operation is the relationship between trading activity and price volatility. Theoretical and empirical contributions by Bessembinder and Seguin (1992), as well as Lamoureux and Lastrapes (1990), demonstrate that trading volume is positively associated with volatility, reflecting the flow of information into the market.

In the FCPO market, Yeap and Lean (2022) provide empirical evidence that increased trading activity significantly influences return volatility. This finding highlights the dual role of trading activity: while it enhances liquidity and facilitates price discovery, it may also amplify market fluctuations. From an operational perspective, this creates a trade-off between efficiency and stability, as higher participation can lead to both improved information processing and increased uncertainty.

The application of volatility models such as ARCH (Engle, 1982) and GARCH (Bollerslev, 1986) further supports the presence of volatility clustering in futures markets, including FCPO. This indicates that periods of high volatility tend to persist, which has important implications for margin requirements and risk management practices within the exchange.

## 2.5 Hedging Function and Its Limitations

The primary economic rationale for futures markets is their role in hedging price risk. Classical hedging theory, as developed by Johnson (1960) and Ederington (1979), suggests that futures contracts can reduce the variance of returns for producers and consumers of commodities.

However, empirical findings in the FCPO market present a more nuanced picture. Ong et al. (2012) report that hedging effectiveness varies significantly, indicating that futures contracts do not always provide optimal risk reduction. Similarly, Zainudin et al. (2019) highlight the challenges of cross-hedging, where mismatches between the futures contract and the underlying exposure reduce hedging efficiency.

These findings suggest that while FCPO retains its theoretical role as a hedging instrument, its practical effectiveness is influenced by market conditions, basis risk, and the behaviours of market participants. As a result, the operational function of FCPO may be shifting away from pure hedging toward a more complex role that includes speculative trading.

## 2.6 Market Microstructure and Trading Behaviours

The operation of futures markets is also shaped by microstructure factors, including order flow, bid–ask spreads, and trader behaviours. Theoretical models developed by Kyle (1985) and Glosten and Milgrom (1985) emphasize the role of information asymmetry in determining price movements and liquidity.

In the context of FCPO, the presence of both hedgers and speculators creates a dynamic trading environment in which prices are continuously adjusted based on new information. While speculators contribute to liquidity, their activities may also introduce short-term volatility, potentially affecting market stability.

Madhavan (2000) and O'Hara (1995) further argue that market microstructure plays a crucial role in determining the efficiency of financial markets. Applying this perspective to FCPO suggests that the operational performance of the market depends not only on its institutional structure but also on the behaviours and interaction of its participants.

# 3. Shariah Perspectives on FCPO Operations

The permissibility of futures contracts has long been a subject of debate among Shariah scholars due to concerns relating to uncertainty (*gharar*), speculative behaviour (*maysir*), deferred exchange, and the sale of non-existent assets (*bay' ma'dum*). Classical Islamic commercial jurisprudence emphasizes that contractual transactions should involve clarity of ownership, certainty of delivery, and the absence of excessive speculation. In conventional futures markets, both payment and delivery are typically deferred until a future date, creating potential conflicts with traditional Shariah principles governing sales contracts. Consequently, commodity futures trading has generated extensive discussion within contemporary Islamic finance literature regarding the extent to which such instruments comply with Shariah requirements (Dusuki, 2012; Obaidullah, 2005).

Scholars and institutions adopting a more restrictive approach generally argue that conventional futures contracts contain elements inconsistent with Islamic commercial law. Concerns frequently raised include the absence of immediate ownership or possession of the underlying asset, the prevalence of speculative trading, and the dominance of offsetting transactions in which contracts are closed prior to physical delivery. These concerns are reflected in resolutions and discussions issued by institutions such as the International Islamic

Fiqh Academy and Accounting and Auditing Organization for Islamic Financial Institutions, which have expressed reservations regarding conventional futures structures involving excessive uncertainty and speculative activities (AAOIFI, 2015; International Islamic Fiqh Academy, 2000). From this perspective, futures trading may deviate from the underlying objectives of trade in Islamic law, where transactions are expected to be connected to genuine economic activity and real ownership transfer (Kamali, 2007).

In contrast, the Malaysian approach toward commodity derivatives has adopted a more pragmatic and regulatory-oriented perspective. The Securities Commission Malaysia, through the Shariah Advisory Council of the Securities Commission Malaysia, has generally recognized the permissibility of crude palm oil futures trading within a regulated exchange environment, subject to specific conditions and operational safeguards (Securities Commission Malaysia, 2020).

This position is largely based on considerations of *maslahah* (public interest), market necessity, and the existence of institutional mechanisms designed to reduce excessive uncertainty. Features such as standardized contracts, centralized clearing systems, transparent trading procedures, and the possibility of physical delivery are viewed as factors that differentiate regulated futures trading from purely speculative transactions (Islamic Financial Services Board & International Shari'ah Research Academy for Islamic Finance, 2019). Furthermore, the existence of a structured exchange framework under Bursa Malaysia and Bursa Malaysia Derivatives is considered to enhance market transparency and operational integrity.

Nevertheless, the permissibility of FCPO trading remains closely linked to the way the market operates in practice. Although the regulatory structure may reduce elements of uncertainty and improve transactional transparency, concerns relating to speculative dominance and the limited occurrence of actual physical delivery continue to be discussed within contemporary Shariah scholarship (Mohamad & Shahwan, 2013). Therefore, analysing the operational structure of the FCPO market becomes important not only from an economic and institutional perspective but also in assessing whether the practical implementation of the market aligns with Shariah principles and regulatory resolutions.

## 4. Research Methodology

The study employs qualitative content analysis and thematic analysis to examine the collected data. Content analysis is used to systematically review and interpret textual materials from academic and institutional sources, while thematic analysis is applied to identify recurring patterns, concepts, and relationships within the literature.

The analysis is conducted in three stages. In the first stage, the selected literature is categorized into key themes, including market structure, price discovery, trading activity, volatility, and hedging function. This thematic classification enables a structured understanding of the existing body of knowledge.

In the second stage, the operational mechanisms of the FCPO market are analysed based on institutional documents. This involves examining the step-by-step processes of futures trading, including order execution, margining, mark-to-market adjustments, and contract settlement. The objective is to provide a clear and systematic explanation of how the market functions in practice.

In the third stage, a comparative analysis is conducted to integrate theoretical insights with actual market operations. This involves evaluating the extent to which the observed practices align with established theories of futures markets. Through this process, the study

identifies inconsistencies, limitations, and areas where theoretical expectations diverge from real-world implementation.

### 4.1 Scope and Limitations

This study focuses specifically on the operational aspects of the FCPO market within the Malaysian context. It does not involve primary data collection, such as surveys or interviews, and does not employ quantitative modelling techniques. As a result, the findings are interpretative rather than statistically generalizable.

Additionally, the study emphasizes the structural and functional characteristics of the market rather than evaluating its performance using econometric methods. While this approach allows for a detailed examination of operational mechanisms, it may not capture short-term market dynamics or predictive relationships.

Despite these limitations, the use of multiple credible sources, including academic literature and official institutional documents, enhances the reliability and robustness of the analysis. The study provides a comprehensive foundation for understanding the operation of FCPO and offers insights that may inform future empirical research.

## 5. Operational Analysis of the FCPO Market

### 5.1 Institutional Framework and Market Structure

The operation of the Crude Palm Oil Futures (FCPO) market is embedded within a structured institutional framework governed by Bursa Malaysia and its derivatives arm, Bursa Malaysia Derivatives. The market operates as a centralized and regulated exchange, where all transactions are standardized and executed through an electronic trading platform.

A defining feature of this structure is the presence of a clearinghouse, which acts as the central counterparty to all trades. By interposing itself between buyers and sellers, the clearinghouse effectively eliminates counterparty risk and ensures the integrity of the market. This institutional arrangement allows participants to trade without direct exposure to the credit risk of their counterparts, thereby enhancing market confidence and participation.

The standardized nature of FCPO contracts, covering aspects such as contract size, delivery terms, and expiry dates, further contributes to market efficiency by reducing information asymmetry and facilitating liquidity. However, this standardization also introduces certain limitations, particularly in relation to the specific hedging needs of individual market participants, which may not always align perfectly with contract specifications.

### 5.2 Trading Mechanism and Order Execution

The trading process in the FCPO market begins with order placement by market participants through licensed brokers. Orders are submitted to the electronic trading system, where they are matched based on price-time priority. This mechanism ensures that orders offering the best price are executed first, followed by those submitted earlier at the same price level.

From an operational perspective, the electronic trading system enhances transparency and efficiency by providing real-time price information and facilitating continuous trading. The presence of both hedgers and speculators contributes to market liquidity, allowing orders to be executed with minimal delay.

However, the interaction between different types of traders also influences price dynamics. Speculators, driven by short-term profit motives, may contribute to rapid price movements, while hedgers typically engage in longer-term risk management strategies. This interplay creates a dynamic trading environment in which prices continuously adjust to new information and market expectations.

## 5.3 Margining System and Financial Safeguards

A critical component of FCPO market operation is the margining system, which serves as a financial safeguard against default risk. Participants are required to deposit an initial margin upon entering a futures position, which acts as a performance bond. In addition, a maintenance margin is imposed to ensure that sufficient funds are maintained in the trading account.

The margining system is closely linked to the mark-to-market mechanism, whereby gains and losses are calculated and settled daily. If the value of a participant's position declines below the maintenance margin level, a margin call is issued, requiring the participant to deposit additional funds. Failure to meet this requirement may result in the liquidation of the position.

This daily settlement process enhances the stability of the market by preventing the accumulation of large, unrecognized losses. At the same time, it introduces liquidity pressures, particularly during periods of high volatility, when frequent margin calls may force participants to exit positions prematurely. As such, the margining system represents both a risk management tool and a potential source of market stress.

## 5.4 Mark-to-Market Mechanism and Price Adjustment

The mark-to-market mechanism plays a central role in the operation of the FCPO market by ensuring that all open positions are valued at current market prices at the end of each trading day. This process involves the recalculation of gains and losses based on daily settlement prices, with profits credited and losses debited to participants' accounts.

From an operational standpoint, this mechanism enhances transparency and reduces systemic risk by ensuring that financial obligations are continuously settled. It also facilitates the efficient incorporation of new information into market prices, as daily price changes reflect the collective expectations of market participants.

However, the mark-to-market process also contributes to volatility transmission. During periods of sharp price movements, the need to meet margin requirements may trigger additional trading activity, thereby amplifying price fluctuations. This feedback effect highlights the interconnected nature of trading, risk management, and price dynamics within the FCPO market.

## 5.5 Contract Settlement and Delivery Process

FCPO contracts may be settled either through offsetting transactions or through physical delivery upon contract maturity. In practice, most market participants close their positions before expiry, resulting in cash settlement through the realization of gains or losses.

Nevertheless, the option of physical delivery remains an important feature of the contract, as it anchors futures prices to the underlying commodity market. The delivery process involves the transfer of crude palm oil that meets specified quality standards to designated delivery points, ensuring that futures prices remain linked to real economic activity.

The coexistence of financial settlement and physical delivery reflects the dual nature of the FCPO market as both a financial and commodity-based instrument. While most trading activity is speculative or hedging-oriented, the delivery mechanism provides a fundamental basis for price convergence between futures and spot markets.

### 5.6 Functional Roles: Hedging, Speculation, and Arbitrage

The operation of the FCPO market is driven by the interaction of three primary types of participants: hedgers, speculators, and arbitrageurs. Hedgers use futures contracts to manage exposure to price fluctuations in the underlying commodity, thereby reducing income uncertainty. Speculators, in contrast, seek to profit from price movements without having an underlying exposure to the commodity.

Arbitrageurs play a complementary role by exploiting price discrepancies between related markets, such as futures and spot prices. Their activities contribute to market efficiency by ensuring that prices remain aligned across different trading platforms.

In practice, however, the balance between these functions is not static. Empirical evidence suggests that speculative trading constitutes a significant portion of FCPO market activity, raising questions about the extent to which the market continues to serve its original hedging purpose. While speculation enhances liquidity and facilitates price discovery, excessive speculative activity may also increase volatility and reduce market stability.

### 5.7 Integration of Theory and Practice

The operational analysis of the FCPO market reveals both alignment and divergence between theoretical expectations and actual market behaviour. Classical theories emphasize the role of futures markets in risk transfer and price stabilization, yet empirical observations indicate that these functions are influenced by trading activity, market structure, and participant behaviour.

While the FCPO market effectively facilitates price discovery and provides a platform for risk management, its hedging effectiveness is not always optimal. Furthermore, the increasing prominence of speculative trading suggests that the market has evolved beyond its traditional role, functioning as a complex financial system characterized by multiple, sometimes competing, objectives. This integration of theory and practice underscores the importance of examining futures markets not only from a theoretical perspective but also through a detailed analysis of their operational mechanisms.

## 6. Discussion

The analysis of the Crude Palm Oil Futures (FCPO) market reveals a complex interaction between theoretical expectations and actual operational practices. While classical futures market theory conceptualizes such markets primarily as instruments for risk transfer and price stabilization, the findings of this study suggest that the operational reality of FCPO extends beyond these traditional functions.

From a Shariah perspective, the operational mechanisms of the FCPO market present both supporting and problematic elements. The SAC of Securities Commission Malaysia has generally recognized the permissibility of crude palm oil futures trading within a regulated exchange environment, particularly due to the existence of standardized contracts, centralized clearing, and the possibility of physical delivery. These features reduce elements of uncertainty

and enhance market transparency. Nevertheless, the findings of this study indicate that speculative activities constitute a substantial portion of market participation, raising continuing concerns regarding the extent to which FCPO trading reflects genuine hedging needs as opposed to short-term profit-seeking behaviors. Consequently, while the operational framework may satisfy certain regulatory and Shariah requirements, the practical conduct of market participants remains a subject of ongoing debate.

From a theoretical standpoint, early contributions by Working (1949) emphasize the role of futures markets in facilitating hedging and enabling speculators to absorb risk. These theoretical foundations imply a relatively balanced market structure in which hedgers and speculators coexist in a complementary manner. However, the operational analysis conducted in this study indicates that such balance may not be consistently maintained in the FCPO market.

One of the key findings relates to the divergence between the theoretical hedging function and its practical effectiveness. Although futures contracts are designed to mitigate price risk, empirical studies reviewed in this paper suggest that hedging effectiveness in the FCPO market is moderate and varies across market conditions. This inconsistency can be attributed to several operational factors, including basis risk, contract standardization, and market volatility. The standardized nature of FCPO contracts, while enhancing liquidity, may not perfectly align with the specific exposure profiles of market participants, thereby limiting the effectiveness of hedging strategies.

In contrast, the role of price discovery appears to be strongly supported both theoretically and empirically. The operational structure of the FCPO market characterized by continuous trading, high liquidity, and rapid information dissemination enables futures prices to reflect new information efficiently. This finding is consistent with the theoretical propositions of Garbade and Silber (1983) and Hasbrouck (1995), which highlight the informational advantage of futures markets over spot markets. As such, the FCPO market can be considered effective in fulfilling its role as a price discovery mechanism.

However, the operational dynamics of trading activity introduce an additional layer of complexity. The presence of speculative trading, which constitutes a significant portion of market activity, plays a dual role in shaping market outcomes. On one hand, speculators contribute to liquidity and facilitate the execution of trades, thereby enhancing market efficiency. On the other hand, their activities may amplify short-term price volatility, particularly in conjunction with the mark-to-market and margining systems. The requirement for daily settlement and the possibility of margin calls can trigger forced trading during periods of market stress, leading to feedback effects that intensify price fluctuations.

This interplay between trading activity and volatility highlights a fundamental tension within the FCPO market. While increased participation improves liquidity and price discovery, it may also compromise market stability. The findings of this study therefore align with broader literature on futures markets, which suggests that the relationship between speculation and volatility is complex and context dependent.

Furthermore, the role of market microstructure factors cannot be overlooked. The interaction between different types of market participants like hedgers, speculators, and arbitrageurs shapes the overall functioning of the market. Theoretical models developed by Kyle (1985) and Glosten and Milgrom (1985) emphasize the importance of information asymmetry and order flow in determining price movements. In the FCPO context, these microstructural elements manifest through the electronic trading system, bid–ask spreads, and the continuous adjustment of prices in response to new information.

Importantly, the study also reveals that the operational mechanisms of the FCPO market such as margining, mark-to-market settlement, and centralized clearing play a crucial role in maintaining market integrity. These mechanisms effectively reduce counterparty risk and enhance transparency, thereby supporting the overall stability of the market. However, they also introduce constraints, particularly in terms of liquidity requirements and the potential for forced liquidation during periods of high volatility.

Taken together, the findings suggest that the FCPO market operates as a multi-functional system in which hedging, price discovery, and speculative trading coexist, but not always in equilibrium. While the market successfully fulfils its informational role, its effectiveness as a risk management tool is subject to limitations. Moreover, the increasing prominence of speculative activity indicates an evolution in the function of the market, reflecting broader trends in global commodity futures markets.

This study therefore contributes to the literature by demonstrating that an analysis of futures markets must go beyond theoretical constructs and consider the practical realities of market operation. By integrating institutional, procedural, and behavioural dimensions, the study provides a more comprehensive understanding of how the FCPO market functions and highlights the need for further research that bridges the gap between theory and practice.

## 7. Conclusion

This study set out to examine the operational structure of the Crude Palm Oil Futures (FCPO) market by integrating insights from existing literature with a detailed analysis of its institutional and procedural mechanisms. In doing so, the study moves beyond conventional approaches that focus on isolated aspects of futures markets and instead provides a comprehensive understanding of how FCPO operates in practice.

The findings demonstrate that the FCPO market functions as a highly structured and regulated system, supported by the institutional framework of Bursa Malaysia and Bursa Malaysia Derivatives. Key operational mechanisms, including standardized contracts, centralized clearing, margining systems, and daily mark-to-market settlement, play a critical role in ensuring market integrity, reducing counterparty risk, and facilitating continuous trading. These features collectively contribute to the robustness and reliability of the market.

Overall, the study concludes that the FCPO market operates as a multi-dimensional system characterized by the interaction of hedging, price discovery, and speculative activities. Although these functions are interrelated, they do not always exist in equilibrium, resulting in both strengths and limitations in market performance. The findings highlight the importance of analysing futures markets through an operational lens, as theoretical models alone are insufficient to capture the complexities of real-world market behaviour. The operational analysis presented in this study demonstrates that while the FCPO market remains a vital component of Malaysia's commodity trading ecosystem, its functions have evolved in response to changing market conditions. Understanding this evolution is essential for ensuring that the market continues to serve its intended purposes effectively while adapting to the complexities of modern financial environments.

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