# THE TOTAL OWNERSHIP COST LINK BETWEEN ISLAMIC MUTUAL FUNDS PERFORMANCE AND ITS DETERMINANTS IN MALAYSIA

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A thesis submitted in fulfilment of the requirements for the award of the degree of Doctor of Philosophy

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## **DEDICATION**

This thesis is dedicated to Allah, my creator, the prophet Mohammed (peace be upon him), who taught us the purpose of life, my beloved father and mother who never cease to give of themselves in countless ways, my husband, who enables me to pursue my dream, my beloved kids, Adrian and Adzeyn, whom I cannot stop loving.

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#### **ABSTRACT**

The rise of the mutual fund industry has prompted studies on mutual fund performance. Investors are increasingly concerned about mutual fund performance when making investment decisions requiring information and guidance. This study examines relationships between determinants of mutual fund performance, namely before-fee performance, fund governance, and market timing ability, on total ownership cost and mutual fund performance. This study further scrutinizes the mediating effect of total ownership cost on the determinants of mutual fund performance. The previous research has mainly focused on the impact of fees and mutual fund performance with great attention on conventional mutual funds compared to Islamic mutual funds. However, this comprehensive study contributes different perspectives by using efficient market theory, asset pricing theory, transaction cost theory, agency theory, and interdisciplinary theory of performance in explaining the relationship among the variables. The results have shown a novel contribution to the link of total ownership cost in Islamic equity fund performance. Panel data regression analysis and structural equation modeling were used to evaluate the association between variables and the mediation effect on the data during the study period from 2008 to 2020, covering the economic recovery stage and current global pandemic crises in the Malaysian mutual fund market. The result suggests a significant relationship between before-fee performance, market timing ability, and total ownership cost with fund performance. Additionally, fund governance has shown a negative association with total ownership cost. The total ownership cost mediates fund governance and performance, demonstrating that costs are more consistent with performance. The findings provide valuable insight into the factors that influence fund performance and cost determination to assist mutual fund providers and policymakers in widening Islamic equity funds.

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#### **ABSTRAK**

Peningkatan industri dana amanah mendorong kajian prestasi dana amanah. Pelabur semakin prihatin terhadap prestasi dana amanah ketika membuat keputusan pelaburan yang memerlukan maklumat dan panduan pelaburan. Kajian ini mengkaji hubungan antara penentu prestasi dana amanah, iaitu prestasi sebelum kos, tadbir urus dana, dan kemampuan masa pasaran, dengan jumlah kos pemilikan dan prestasi dana amanah. Kajian ini juga meneliti kesan pengantaraan jumlah kos pemilikan terhadap penentu prestasi dana amanah. Kebanyakan penyelidikan sebelum ini memfokuskan pada kesan yuran dan prestasi dana amanah dengan fokus yang besar terhadap dana amanah konvensional berbanding dengan dana amanah Islam. Walau bagaimanapun, kajian ini lebih komprehensif dengan menggunakan teori pasaran cekap, teori harga aset, teori transaksi kos, teori agensi, dan teori prestasi antara disiplin dalam menjelaskan hubungan antara pemboleh ubah. Keputusan kajian telah menunjukkan sumbangan terhadap pautan kesan pengantaraan jumlah pemilikan kos dalam prestasi dana ekuiti Islam. Analisis regresi data panel dan pemodelan persamaan struktur digunakan untuk menilai hubungan antara pemboleh ubah dan kesan mediasi terhadap data dengan tempoh kajian dari tahun 2008 hingga 2020, meliputi tahap pemulihan ekonomi dan krisis pandemik global semasa di pasaran dana amanah Malaysia. Dapatan menunjukkan hubungan yang signifikan antara prestasi sebelum kos, kemampuan masa pasaran, dan jumlah kos pemilikan dengan prestasi dana. Selain itu, tadbir urus dana menunjukkan perkaitan negatif dengan jumlah kos pemilikan. Apabila keseluruhan kos pemilikan menjadi pengantara antara tadbir urus dan prestasi dana, ia mengesahkan bahawa kos lebih konsisten dengan prestasi. Dapatan ini memberikan informasi yang bernilai mengenai faktor-faktor yang mempengaruhi prestasi dana dan penentuan kos yang akan membantu pembiaya dan penggubal dasar dana amanah dalam mengembangkan dana ekuiti Islam.

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#### LIST OF ABBREVIATIONS

NAV - Net Asset Value

MFP - Mutual Fund Performance

MTA - Market Timing Ability

FG - Fund Governance

BFP - Before-fee Performance

SMB - Small Minus Big

HML - High Minus Low

PR1Y - One-year Momentum

FTSE - Financial Times Stock Exchange

TOC - Total Ownership Cost

BSIZE - Board Size

FMGR - Fund Manager

BIND - Board Independence

RMT - Return on Market

OLS - Ordinary Least Square

CLRM - Classical Linear Regression Model

GMM - Generalized Method of Moments Model

2SLS - Two-Staged-Least-Square

## LIST OF SYMBOLS

γ	-	Coefficient
$\mathcal{E}$	-	Error Term
β	-	Beta
α	-	Alpha
λ	-	Individual-effect
σ	-	Standard Deviation
u	_	Remainder Error

#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 Overview of Mutual Fund

A mutual fund, popularly identified as a unit trust, is an asset with collective features that permits investors with parallel goals to bring together their funds in a portfolio of diversified asset classes: shares, fixed-income assets, money market instruments, cash, bonds, and properties as well as commodities. It is a type of alternative investment available to investors looking for investment diversification with the help of a competent professional fund manager. Mutual funds can be classified according to their investment objectives, such as income-seeking, capital growth, capital preservation, or a combination of those objectives. The funds can also be categorized according to their geographical focus, like a global equity fund or sectoral focus, like technology stocks.

The mutual fund is available for both institutional investors and individuals. Individual investors are generally difficult to hold a direct investment exposure to several asset classes concurrently. However, with this mutual fund investment, it is likely for the individual investors to gain multiple exposures to the various asset classes all at once. The broader the spread of investments, the less volatile investment risks and returns. Due to its diversified portfolio, mutual funds investment is less risky than direct investment into stock markets. Mutual funds provide the benefit of diversification across different sectors and companies. Diversification reduces the risk as funds seldom move in the same direction and in the same proportion at the same time. Hence, when one asset is taking a loss, the others will be making offsetting gains (Khalid et al., 2013).

A fund manager is the approved professional party entrusted with managing the unit trust transaction and is responsible for making a structured decision in accordance with sound investment principles. The investors will benefit from the fund manager's expertise, knowledge, and experience, leading to the expectation of above-average investment returns. The investors will typically earn a yield on investment by distributing income and principal appreciation, which originated from a collection of assets accompanying the unit trust fund. The fund manager typically charges fees for their services. Mainly, they charge a one-time charge for payment to mutual fund distributors. The charge, also known as a fee, is either paid at the time of purchase inception (front-end load) or at the time of fund redemption (back-end load). It is calculated as a portion of the total invested.

Some investors prefer an investment that can easily be liquidated without hassle. Investment in a mutual fund, on the other hand, is more liquid. An investor can liquidate the investment by selling the units to the fund if open-end or selling them in the market if the fund is closed-end. In open-end schemes, the investor gets the money back promptly at net asset value (NAV) related prices from the mutual fund. In contrast, in closed-end schemes, the units can be sold on a stock exchange at the prevailing market price, or the investor can avail of the facility of direct repurchase at NAV-related prices by the mutual fund (Mane, 2016).

Mutual funds are among the best investment alternatives that offer various advantages. These advantages include lesser starting capital, professional management, portfolio diversification, lower risk than the stock market, and high liquidity. Table 1.1 simplifies the comparison of mutual fund options among other types of investments. It shows that the mutual funds have moderate volatility with higher returns, higher safety, higher liquidity, and higher convenience.

Table 1.1 Comparison of Different Investment Options

Options	Returns	Safety	Volatility	Liquidity	Convenience
Equity	High	Low	High	High/Low	Moderate
Fixed Income Bond	Moderate	High	Moderate	Moderate	High
Debentures	Moderate	Moderate	Moderate	Low	Low
Corporate Fixed Deposit	Moderate	Low	Low	Low	Moderate
Public Provident Fund	Moderate	High	Low	Moderate	High
Life Insurance Corporation	Low	High	Low	Low	Moderate
Gold	Moderate	High	Moderate	Moderate	Low
Real Estate	High	Moderate	High	Low	Low
Mutual Fund	High	High	Moderate	High	High
Bank Deposit	Low	High	Low	High	High

There are two categories of mutual funds in Malaysia which are conventional-based and Islamic-based funds. Both have similar objectives to satisfy shareholders and to gain above-average returns. Nevertheless, Islamic mutual funds are funds that are subjected to several limitations. Such limitations are guided by Islamic law, which originated from the Quran and other sources of Shariah. Muslim investors are required to adhere to the restrictions by Islamic law. Thus, fund managers must maximize the returns from their investment portfolio subject to these restrictions. Such restrictions that being specified are all transactions involved must be free from prohibited activities or elements following Shariah rulings such as alcohol production, usury (riba), gambling (maysir), and ambiguity (gharar).

All wealth creation under Islamic transactions must be generated from a joint venture between a capital provider and the capital operator, which means the risk and return involved in Islamic investment should be shared accordingly. Furthermore, the returns from investment ought to be earned instead of pre-determined. This

fundamental obligation made the Islamic mutual funds theoretically unique. Generally, Islamic mutual funds are developed principally for Muslim investors as an alternative asset with Shariah compliance funds. Hence, it gave a call to Shariah scholars to incorporate the Shariah law into an investment transaction so that Muslims can rest assured that their money is being invested in compliance with Islamic teachings (Clarke, 2015).

## 1.2 Background of the Study

Mutual fund performance had been one of the essential studies in past literature. Practically those early studies focus more on the United States market given readily available and accessible historical data. Early studies have pondered fund attributes as latent determinants of fund performance which include size, age, fees, trading activity, flows, and past returns (Brown & Goetzmann, 1995; Carhart, 1997; Chen et al., 2004; Elton et al., 1993; Ferreira et al., 2012; Grinblatt & Titman, 1994; Gruber, 1996; Hendricks et al., 1993; Ippolito, 1989; M. C. Jensen, 1968; Malkiel, 1995; Sirri & Tufano, 1998; Zheng, 1999)

Mutual fund performance has become an essential concern to the investors in making appropriate investment selections, including detailed information and investment advice. Since there is a vast number of funds in presence, the process of appraising and choosing the proper funds can be tricky and challenging. Therefore, past studies had composed the data on mutual funds, comparing and rating fund performances, and providing investors with information as investment aids in making decisions.

The mutual fund industry is well-established internationally. The United States and Europe are the most significant contributors to the global mutual fund asset under management, as shown in Figure 1.1 below. As of the end of 2020, the assets of mutual funds in the United States amounted to approximately 23.9 trillion euros. The global asset management industry is moving to passive investing, and liquid alternative mutual funds are prevalent in the western world. However, the penetration of funds is

low in Asian markets. Mutual fund penetration in most Asian nations has lagged behind the growth in financial assets held by Asian households. It is significantly lower compared to the economies of the United States and Europe. Mutual funds are only about 10 percent of Asian investors' financial holdings as an investment option. The lack of knowledge about mutual funds is evident in the low penetration in China, Hong Kong, Taiwan, and Singapore products. More than 43 percent of mass retail investors in Asia are not investing in mutual funds due to a lack of knowledge about the products (Hersch, 2014). Low financial literacy, excessive fund churning, and varying advice levels characterize the mutual fund business in Asia's rising economies, resulting in low product acceptance. Mutual funds are considered long-term savings instruments and retirement choices in western countries, such as the United States. However, investors see mutual funds primarily as trading tools in Asia (Ernst and Young LLP, 2016).

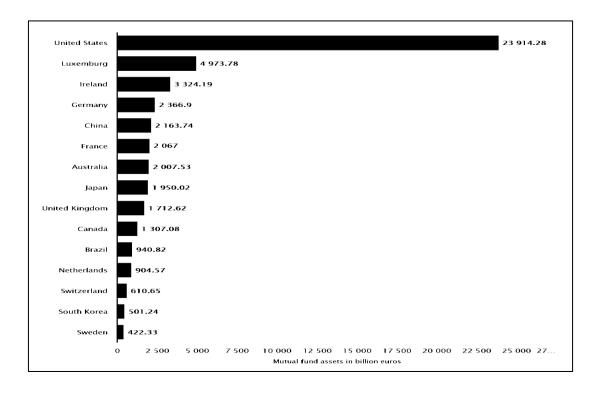


Figure 1.1 Mutual Fund Assets in Selected Countries Worldwide in 2020

Although the Asian countries have low penetration of mutual funds investment, the Malaysian mutual fund industry has witnessed a continuous growth and gradual increase from RM130.44 billion in 2008 to RM519.529 billion in 2020, as shown in Figure 1.2 (Securities Commission Malaysia, 2021). It shows that the awareness of

mutual funds investment has progressively increased among Malaysians. According to the Federation of Investment Managers Malaysia (FIMM), the low market valuation and market correction situation signify a reasonable period for public investors to invest in mutual funds. The investors will accumulate more value and gain better investment returns in the long term (Mokhtar, 2016).

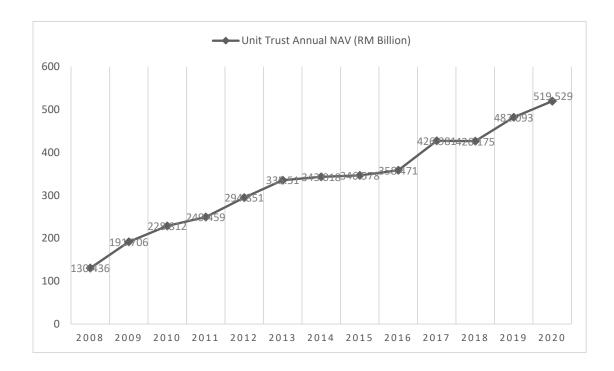


Figure 1.2 Total Net Asset Value (NAV) of Mutual Funds in Malaysia

Comparably, the global Islamic fund and wealth management sector are growing, followed by a strong request from Muslim and non-Muslim investors (Bank Negara Malaysia, 2016). In Malaysia, the demand for Islamic mutual funds has been quite encouraging, as evidenced by the gradual increment of total Islamic NAV over the years. Figure 1.3 recorded the progressing net asset value of Islamic unit trust from 2015 to 2020. According to Elfakhani & Hassan (2007), Islamic mutual funds had a strong performance instead of the S&P 500 Index (a conventional standard benchmark tool) and FTSE Islamic Indices (an Islamic benchmark) throughout the economy slumps. Due to the finding, most investors, including the conventional based, might consider the Islamic funds in their portfolio collection during the downturn (Mansor & Bhatti, 2011). This research will emphasize Islamic mutual funds in the analysis.

The performances will be compared with the market return benchmark to see if there is any relation between both return performances.

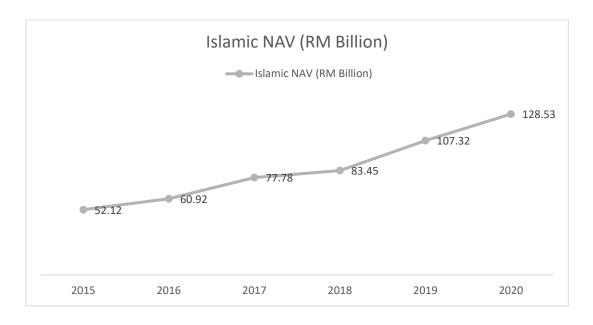


Figure 1.3 Net Asset Value (NAV) of Islamic Mutual Funds in Malaysia

Though the mutual fund is progressively increased, most Malaysians do not use their savings to diversify into mutual funds or other investment types. According to the National Findings 2018 report by the Malaysian Financial Planning Council (MFPC), only 31.5 percent of Malaysian selected mutual funds as their financial resource for retirement compared to others, as illustrated by Figure 1.4 below. The majority of Malaysian chose savings as their significant financial resource for retirement due to a lack of awareness of different types of financial resources available to them (Malaysian Financial Planning Council, 2018).

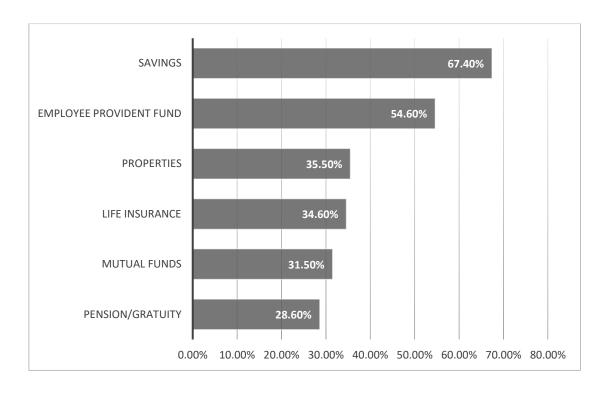


Figure 1.4 Financial Resources for Retirement

The Malaysian government has been supportive in promoting the mutual fund industry. One of the initiatives by the Malaysian government to encourage people to invest in the mutual fund is the opportunity to withdraw money from Employee Provident Fund (EPF) account one. In 1996, EPF launched the Members' Investment Scheme, allowing members with more than RM55,000 in their account one to invest in unit trusts through approved Fund Management Institutions appointed by the Securities Commission. According to EPF annual report 2016, over half of Malaysian households have zero financial or intangible assets such as stocks, bonds, and bank deposits. One in three Malaysians has zero savings account, consisting of 90% rural and 86% urban households. In addition, as reported by The Star in October 2017, over two-thirds of EPF members aged 54 have below RM50,000 in EPF savings, and with the household poverty line income at RM930 monthly, this savings will only last for four and half years. As a result, most EPF savings will not be adequate to enable retirees to keep out of poverty after retirement. Therefore, Malaysians should find other investment alternatives such as mutual funds to enhance their savings for retirement.

Essentially, most mutual funds, regardless of Islamic and conventional type, generate diversified and relative yields along with professional aids. For these respects, they incur costs containing management and load fees and an added exit penalty. Following past research, fees are considered one of the significant factors that can explain mutual fund performance. Fees are typically linked with a fund's return performance, and it is lesser in passively traded funds than managed funds (Mansor et al., 2015). Vidal et al. (2015) stated that mutual fund fees are a substantial return predictor for all funds irrespective of whether the funds have negative or positive links with the fees. They found that in both cases, fees are adversely related to return probability. On the other hand, mutual funds fees were also found to not necessarily illustrate the performance of the funds (Garyn-Tal, 2013; Nanigian, 2012; Vyšniauskas & Rutkauskas, 2014). Due to the different views on the fees that may and may not affect the performance of mutual funds, this study will further investigate whether there is a consistent relationship between the cost and performance.

Some investors would invest in Islamic Shariah-based funds due to religious belief, but some want to be released from financial stocks. The Malaysian government had approved the extension of time for tax exemption on fees for managing Islamic mutual funds until the year of assessment 2020. This tax exemption aims to inspire unit trust management companies to launch more Islamic funds in the market as they will benefit from the tax exemption on the fees collected to manage the funds (Mokhtar, 2016). It is also believed that this government initiative can promote the Islamic mutual fund industry more further. Due to this growing demand for Islamic Shariah-based funds, this study is inspired to analyze further. Nevertheless, a dearth study focused on the relationship between cost and Islamic mutual funds.

The cost of living has been going up over the years. A rise in Consumer Price Index (CPI) means an average household must spend more ringgit to sustain a similar standard of living. The CPI quantifies the overall cost of goods and services bought by a standard consumer. According to the Malaysian Financial Planning Council (2018), Malaysians prefer a current good standard of living than future planning for retirement. Thus, people will tend to spend more and do not save money for investment. Given

that, to attract people to invest instead of spending, lower cost can be one of the factors in promoting and encouraging Malaysians.

In addition, Securities Commission Malaysia has introduced new incentives of stamp duty waiver to mid and small companies and waiver of trading and clearing fees for first-time investors with effect from 1 March 2018 to invest in Malaysian stock market. Thus, it verifies that costs or fees play an important role in investment decision-making. On top of that, most investments also require significant initial capital and high dealer or brokerage fees. However, the initial capital to begin with mutual funds investment is much lesser compared to direct investment. In general, this study pays special attention to the cost of investing in mutual funds due to the concern of costs involved and higher interest rates in the market. It is crucial to choose an investment that can cover at least the initial cost.

This research will expand the period of mutual fund performance evaluation from the year 2008 to 2020 that will cover the recession and recovery period of the Malaysian market. Based on the Malaysian Business Cycle Clock (MBCC) reported by the Department of Statistics Malaysia, Malaysian overall economic performances for 2008 to 2020 are in the recession, slowdown, and recovery period. The years 2008 to 2009 were the years of global economic downturn, while 2019 to 2020 were the global Covid-19 pandemic continuing till today. The years between 2010 to 2018 were in slowdown and recovery period.

#### 1.3 History of Mutual Funds in Malaysia

Malaysia's mutual fund industry was initiated in 1959 whereby Malayan Unit Trust Ltd. primarily recognized a unit trust during the formative years of 1959 to 1979. The initiative was in slow growth due to a deficiency in public interest towards innovative investment inventions. There were only five-unit trust management corporations with 18 funds during the period. In the 1970s, it was a period whereby the government participated in the unit trust industry in conjunction with the Federal

Government's encouragement to activate local domestic funds. Then, another significant historical development in the unit trust industry was in the 1980s when the National Unit Trust Scheme fund (ASN) was introduced by Permodalan Nasional Berhad (PNB) in 1981. This period remarked a great response from the public. During the 1980s, more subsidiaries of financial institutions were also observed operating as unit trust management companies. Their involvement helped in publicizing and circulation of unit trusts via the bank's outlet linkage. Thus, it leads to the rapid growth of more management corporations established and funds under management. The Islamic fund management undertook to nurture speedily in Malaysia during the 1990s. However, their presence was hardly giving influence on the industry. It was stated that the initial Islamic fund in Malaysia was Tabung Amanah Bakti, introduced by Asia Unit Trust Berhad in 1971. The official primary Islamic mutual fund was commenced in 1993 by Arab-Malaysian Unit Trust Bhd using the name of Tabung Ittikal Arab-Malaysian (Mansor & Bhatti, 2011).

On 1 March 1993, the Securities Commission was formed and trailed by executing the Securities Commission (Unit Trust Scheme) Regulations in 1996. Although a financial catastrophe occurred in 1997-1998, the unit trust industry still sustained its ascendant trend. The industry documented tremendous growth of Net Asset Value (NAV) from RM43 billion in 2000 to RM169 billion on 31 December 2007. However, this robust progress was disrupted in 2008 due to the financial crisis that began from subprime loans in the US, the flowing of the property bubble, the worldwide credit crisis, the banking catastrophe, and the hastily deteriorating global stock price. Unfortunately, the NAV dropped to RM134 billion on 31 December 2008 (Federation of Investment Managers Malaysia, 2014). In 2010, the industry showed improvement in higher NAV of RM226 billion, and the NAV size is about one-third of the economy size (Mansor et al., 2015).

The numbers are growing to 712 approved unit trust funds, including funds still pending for launching in Malaysia as of 31 December 2020, comprising 468 conventional funds and 224 Islamic-based funds. Total NAV is around RM519,529 billion, totaling RM390,995 billion of conventional funds and RM128,534 billion of

Islamic-based funds. Table 1.2 below depicts the summary of unit trust funds statistics as of 31 December 2020.

Table 1.2 Statistic Summary of Unit Trust Funds as of 31 December 2020

<b>Total Number of Approved Funds*</b>	712
- Conventional	468
- Islamic-based	224
<b>Total Number of Launched Funds*</b>	696
<ul><li>Conventional</li></ul>	456
<ul><li>Islamic-based</li></ul>	240
<b>Total Units in Circulation (billion Units)</b>	745,051
<ul><li>Conventional</li></ul>	530,613
<ul><li>Islamic-based</li></ul>	214.438
<b>Total Number of Accounts</b>	20,546,820
<ul><li>Conventional</li></ul>	17,327,954
– Islamic-based	3,218,866
Total NAV (RM billion)	519,529
<ul><li>Conventional</li></ul>	390,995
– Islamic-based	128,534
Percentage of NAV to Bursa Malaysia Market Capitalisation	28.59%

<sup>\*</sup> Includes funds authorized but pending launch

### 1.4 Problem Statement

As Islamic banking has grown, so has the demand for shariah-compliant assets. Muslim middle-class affluents and experts have also increased their interest in Islamic investment operations. Malaysia has established itself as a global leader in the creation of Islamic finance and investment products with diversified portfolios. Islamic banking assets in Malaysia were RM30.9 billion at the end of 2010, according to PricewaterhouseCoopers (PWC) Malaysia. They will reach RM3 trillion by 2020. Malaysia offers a diverse range of Islamic financial goods and services and has established itself as the world's leading Islamic financial institution, particularly in the Islamic capital market. As a result of its strategic location, multilingual population,

and foreign investment, Malaysia has taken an innovative approach to meeting the industry's demand. In addition, a market-oriented economy and pro-business economic policies create a dynamic and lively business climate in Malaysia, with well-developed infrastructure and a productive workforce (Mansor et al., 2020).

The Islamic financial system's comprehensive nature provides significant investment opportunities for both Islamic and conventional investors in terms of managing their portfolios to meet financial needs. For example, the government of Malaysia is supportive of the Islamic mutual fund industry, as evidenced by policies such as tax exemption, the establishment of the Kuala Lumpur Shariah Index (KLSE), liberalisation of overseas investment rules, the ability for Islamic fund management companies to be established with 100 percent foreign ownership (which appeals to international investors), and the introduction of a private retirement scheme in 2012 to encourage young generations to start investing in mutual funds for future planning. This might be regarded as the Malaysian government's efforts to establish the country as a global hub for Islamic capital markets, notably in the area of Islamic mutual funds investment and management (Abdul Aziz et al., 2019; Clarke, 2015; Jamaludin et al., 2012; Abdullah et al., 2007).

Islamic mutual funds are a rapidly expanding segment of the Islamic capital market. It gives investors access to professional fund management that optimises returns across a range of risk profiles. Improving religious and ethical values without sacrificing the standard requirements of diversification, liquidity, or performance is at heart of Islamic mutual fund's mission (Ahmad et al., 2019; Azmi et al., 2018; Shaliza Alwi et al., 2019). In addition, Islamic financial services have been less affected by financial crises than their respective benchmarks since Shariah law prohibits numerous high-risk operations (Ahmad et al., 2019; Boo et al., 2017; Makni et al., 2015). Muslim investors must abide by Shariah law in order to make sound investing decisions from an Islamic perspective. Investors' religious beliefs also play a role in their decision-making process (Jamaludin et al., 2012; Walton et al., 2017). A product that adheres to the Shariah guidelines must be used or selected by Muslim investors. Religiosity serves as motivation for Muslims to follow the right path. Shariah-compliant equities are those that are permitted by Islamic law or shariah, and they represent the investing

prospects for both Muslim individuals and organisations (Azmat et al., 2020; Basov & Bhatti, 2016; Mansor et al., 2020; Shaliza Alwi et al., 2019). To comply with Shariah law, mutual funds cannot hold any riba al nasiah, maysir, gharar, or haram items or services. This study assesses the performance of Islamic equity funds in Malaysia. Unlike a conventional equity fund, which can invest in any security on the market, an Islamic equity fund can only invest in shariah-compliant assets and must adhere to shariah standards and rules regarding investment styles and trading methods. An Islamic equities fund is governed by a shariah advisory council that oversees the fund's security selection process and investment strategy.

The study of Islamic mutual funds in Malaysia is crucial for understanding the causes of the 1997 Asian Financial Crisis and the liquidity crisis produced by the Islamic finance industry's excess money (IOSCO, 2004). Furthermore, the performance of mutual funds has also received attention because of investors' concern about lower returns since the impact of the 2007-2008 global financial crises on investors' returns (Mansor et al., 2015). The evaluation of the performance of Islamic mutual funds in Malaysia is especially significant given that the growth rate of Islamic funds (84 percent nominal/13 percent annualised) has outpaced that of the worldwide mutual fund industry (68 percent nominal/11 percent annualised). This is based on the most recent comparable data from Lipper and ICI worldwide statistics for the five years ending in the fourth quarter of 2021. According to Fitch Ratings, Saudi Arabia and Malaysia continue to be the world's leading Islamic fund domiciles, indicating well-established local markets. Malaysian fund assets are more evenly distributed, with equities funds accounting for the largest component, accounting for 44 percent of total assets under administration (NST Business, 2022).

Numerous studies on mutual fund performance have been conducted, primarily in the developed world. Mutual fund performance has been studied extensively for decades due to its undoubted effect on wealth. The question of whether mutual fund managers are skilled enough to beat the market is still debated. While past performance is important, the question of future performance is even more so (Matallín-Sáez et al., 2016). The disparity between the growth and performance of the mutual funds industry, particularly in Malaysia, raises the question of whether investing in this

industry is worthwhile. Empirical evidence indicates that mutual fund performance in Malaysia is inconsistent when compared to the market benchmark (Abdullah and Shari, 2019). Only a few mutual funds have outperformed the market, and it is implausible to expect mutual funds to generate higher returns while simultaneously reducing risk (Shrestha & Shrestha, 2020). Another factor that influences investors to invest in mutual funds is the professional management of the funds. Inadequate corporate governance and transparency in the investment process can act as a deterrent to investors, resulting in decreased investment (Shrestha & Shrestha, 2020). A mutual fund's fees have a direct impact on its profitability, so open-ended mutual fund schemes considered fees to be an important factor to influence mutual fund performance (Dhar et al., 2017). Past studies have been unable to identify specific factors that influence mutual fund performance. According to Ferreira et al. (2012), between the United States and the rest of the world, there are significant differences in the factors that influence mutual fund performance. Funds in the United States are much larger than those elsewhere in the world, and the fund industry in the United States is older and more developed. Thus, this study tried to fill the gap by examining the past performance particularly before-fee performance, market timing ability, fund governance, market benchmark and cost that impact the performance of Islamic equity mutual fund.

Past empirical results also showed that well (poorly) performed funds in the previous year tend to continue performing well (poorly) in the following year (Hou, 2012). In addition, Gil-bazo & Ruiz-verdú (2009) investigated the function of before-fee performance in establishing fund fees. The distinctive fund characteristics were examined to ascertain the association between before-fee execution and the sum of costs compensated by investors. They revealed a negative relation between funds' before-fee performance and the fees imposed to investors due to funds that tactically secure payments based on former or anticipated performance. Jordan & Riley (2015) also stated that historical return volatility influences future mutual fund performance. The studies on before-fee performance and historical return affecting the fees are mostly done outside Malaysia. Therefore, this study adopts the before-fee performance as one determinant influencing the Malaysian Islamic mutual fund performance and the cost.

When the fund manager makes investments, they need to be logical and only made after a lot of research and study. People who want to invest in a mutual fund may not care as much about the company's corporate governance as they do about how the company is run. There are two things that help: a high level of professionalism and good corporate governance. These things help the investors to know that their financial interests will always come before the interests of the fund manager (Shrestha & Shrestha, 2020). Most past literature examined mutual fund performance without considering the governance structure of funds (Carhart, 1997; Ding et al., 2005; Grinblatt & Titman, 1989; Malkiel, 1995). Then again, the fund governance position has also been questioned in the determination of fees. Gil-bazo & Ruiz-verdú (2009) uncovered that consistent fee alongside performance might accompany that good fund governance. However, there was no indication that effective fund governance lessens the effects of investor sensitivity on the mutual fund. Na Lamphun & Wongsurawat (2012) also stated no solid evidence concerning the fund's governance and the level of fees and expenses charged. This study investigates the influence of fund governance on Islamic mutual fund performance and the cost charged by the fund management company.

Another popular reason for determining mutual fund performance and setting the fees to be charged is the capability of mutual fund managers or investors to evaluate the stock market timing and skills of funds selection. However, prior studies supporting fund market timing's ability vanish as soon as the up-to-date methodology was adopted (Mansor et al., 2015). The study also revealed that there was not any substantial fund selectivity skill among all managers after the deduction of all fees. This finding stipulates indication that the higher costs contribute a critical unfavourable influence on all funds' portfolios return performance. Meanwhile, the before-fee return performance was not giving clear evidence about the market timing ability of the managers. Investors' performance and actions are the responsibility of fund managers. The ability of fund managers to add value to the resources they manage is determined by the financial return of unit trusts. However, every investor is concerned about the performance of various portfolios. After all, investing is meant to grow or at least preserve financial wealth. Ultimately, the fund manager's value addition to wealth managed must be measured by results. The managers must therefore carefully select the securities to add to the portfolio to earn excess returns (Musembi,

2016). Thus, this study investigates the market timing ability as a factor of Islamic mutual fund performance and the cost.

In a frictionless financial market, investors cannot costlessly modify their holdings. Frictions in the financial market can impose significant costs on investors. Recognizing these costs enables fund management companies to assess the entire cost of transactions and decide where to locate them if at all. The companies that can reduce the costs associated with market frictions have a competitive advantage (DeGennaro & Robotti, 2007). The total ownership cost is chosen in this study because it refers to a detailed understanding of mutual fund ownership cost whereby any significant financial decision is likely to be influenced by the expected costs to incur over a period of time. There is a lack of studies examining the total ownership cost mediating the relationship between determinants and mutual fund performance. Past studies focus on the transaction cost and switching cost as a mediator in different field of studies. For instance, the decrease of transaction costs between firms helps mediate the impact of inter-firm trust on logistics performance (Piboonrungroj et al., 2011), the transaction costs play a mediator role between interpersonal trust and livelihood success of the members in community-based organizations (Priyanath & Habaragamuwa, 2020) and transaction cost mediates the property right of zakat and performance of zakat (Amar Aziz et al., 2019). Switching cost is exclusively mediating the service quality-loyalty relationship (Ngo et al., 2019). However, whether the cost is also applicable as the mediator in the mutual fund context is yet to be conclusive. Given that the transaction costs have evidence to be a mediator in a relationship between determinants and performance, and it is supported by the transaction cost theory, this study inspired to investigate the mediation effect of total ownership cost on the determinants of mutual fund performance. This study will initially investigate the direct effects of determinants on the total ownership cost that, in turn, directly affects mutual fund performance. Then an indirect effect or mediational effect will then be examined in which the variables lead to mutual fund performance through the total ownership cost.

Most previous studies did independent research on the factors that influence mutual fund performance, the factors that affect mutual fund fees (cost), and the effect of fees (cost) on mutual fund performance. Most of the studies also focus on conventional mutual funds. The majority have been carried out in the developed countries primarily United States, and little attention has been given to Islamic mutual funds. Understanding Islamic mutual funds are essential as the demand for that type increases from Muslim investors but also non-Muslim (Bank Negara Malaysia, 2016). In addition, the performance of Islamic mutual funds is better during the economic downturn (Mansor & Bhatti, 2011).

In conclusion, Table 1.3 summarizes the research gap that this study will seek to fulfill.

Table 1.3 Research Gap

Constructs/Relationships	What do we know?	What do we need to
		know?
Before-fee performance, market timing ability, fund governance, total ownership cost, and mutual fund performance	<ul> <li>Most past studies were conducted in the United States and outside Malaysia</li> <li>Most studies on conventional mutual funds</li> <li>Past studies have been unable to identify specific factors that influence mutual fund performance</li> </ul>	<ul> <li>Are those determinants applicable for Islamic equity mutual funds in Malaysia?</li> <li>Will the relationship between the determinants and Islamic equity mutual fund performance exist in Malaysia?</li> </ul>
Before-fee performance, market timing ability, fund governance, and total ownership cost	<ul> <li>Most past studies on conventional mutual funds</li> <li>Most past studies were conducted in the United States and outside Malaysia</li> </ul>	• Is there any relationship between the determinants and total ownership cost in Islamic equity mutual funds, particularly in Malaysia?
Market return benchmark and mutual fund performance	Most past studies compare market return benchmark and mutual fund performance	Do Islamic mutual funds outperform the market return benchmark,

	<ul> <li>Most past studies were conducted in the United States and outside Malaysia</li> <li>Most past studies on conventional mutual funds</li> </ul>	particularly in Malaysia?  There is a lack of studies comparing market return benchmark and mutual fund performance after considering total ownership cost.
The mediating role of total ownership cost in between the determinants and mutual fund performance	<ul> <li>Dearth studies on the mediating role of total ownership cost</li> <li>Past studies focus on transaction cost and switching cost as the mediator role but not in the mutual fund context</li> </ul>	The mediating link is yet to be known

## 1.5 Research Questions

The main objective of this study is to analyze the determinants of mutual fund performance of conventional and Islamic mutual funds in Malaysia from 2008 to 2020 and examine the mediating role of total ownership cost between the determinants and mutual fund performance. As such, this study attempts to answer the following research questions:

RQ1: Does before-fee performance, market timing ability, fund governance and market return benchmark affect Malaysian Islamic equity mutual fund performance?

RQ2: Does before-fee performance, market timing ability and fund governance affect total ownership cost in Malaysian Islamic equity mutual fund?

RQ3: Does total ownership cost affect Malaysian Islamic equity mutual fund performance?

RQ4: Does total ownership cost mediate the relationship between before-fee performance, market timing ability, fund governance and Malaysian Islamic equity mutual fund performance?

## 1.6 Research Objectives

The following research objectives are derived from the research questions:

RO1: To examine the relationship between before-fee performance, market timing ability, fund governance, market return benchmark and Islamic equity mutual fund performance in Malaysia.

RO2: To investigate the relationship between before-fee performance, market timing ability, fund governance and total ownership cost in Malaysian Islamic equity mutual fund.

RO3: To assess the relationship between total ownership cost and Islamic equity mutual fund performance in Malaysia.

RO4: To examine the mediating effect of total ownership cost in the relationship between before-fee performance, market timing ability, fund governance and Islamic equity mutual fund performance in Malaysia.

### 1.7 Significance of the Study

This study will provide both practical and theoretical implications. Practically, this study will be precious to the Malaysian mutual fund industry. It will provide meaningful insights to fund management companies on the factors affecting mutual

fund performance and cost determination, particularly in Islamic equity mutual fund. Generally, the higher cost of any investment instruments will shy the potential investors away from investing. This study should provide a thorough understanding of the impact of costs on mutual fund investments in Islamic equity mutual funds. This study also provides practical implications for Malaysian mutual fund managers in terms of creating, marketing, and targeting investors for Islamic equity mutual fund schemes. Subsequently, the companies will improve their efforts to promote and encourage potential investors to invest in their funds. Mutual fund performance has a significant influence on mutual fund investment; therefore, fund managers must consider these aspects when establishing Islamic mutual fund schemes while ensuring that the objective of the potential group of investors are adequately handled. Similarly, corporate governance and the fund manager's reputation were important conditions for the investment, thus the fund manager must exhibit professionalism and maintain strong governance. Even though the investors own the funds, mutual fund investors have no meaningful role or decision-making ability. Policymakers and regulators must play a substantial role in safeguarding the financial interests of unit holders. This study assists policymakers and regulators in understanding the elements considered significant by investors and instilling systems and regulations to protect unit holders' interests. This would allow for the promotion and improvement of general investor engagement in Malaysia's Islamic equity mutual funds and Islamic capital market. Moreover, the potential investors also will have a better outlook on the ongoing accomplishment of Islamic equity mutual funds in Malaysia.

As mentioned earlier, most previous studies did independent research on the factors that influence the cost charged and the effect on mutual fund performance. There is a lack of studies investigating the total ownership cost and its impact on mutual fund performance. Furthermore, there is a dearth of studies on the total ownership cost as a mediator between the determinants and mutual fund performance. This study will investigate the factors impacting total ownership cost and Islamic equity mutual fund performance and the relationships between the two, which will be different from any previous research. Several theories will be applied to explain and justify the relationship between the specified variables. Moreover, the effect of such total ownership cost on Islamic equity mutual fund performance also has little consideration compared to the conventional mutual fund. Therefore, it can be said that

this study provides new insights into the Islamic equity mutual funds' analysis and contributes significantly to the theoretical and managerial aspects of this study.

## 1.8 Scope of the Study

The research focuses on analyzing the effect of before-fee performance, market timing ability, and fund governance on total ownership cost and performance. The market return benchmark is associated with mutual fund performance to provide a better evaluation.

Most previous research emphasis the association between mutual fund fees and performance in the United States (Adams, Mansi, & Nishikawa, 2012; Garyn-Tal, 2013; Gil-bazo & Ruiz-verdú, 2009; Hu, Chao, & Lim, 2016; Vidal et al., 2015) and little consideration has been done in Malaysia particularly in Islamic equity mutual funds. Most studies conducted in Malaysia focus exclusively on the performance comparison of mutual funds between conventional and Islamic mutual funds (Abdullah & Abdullah, 2015; Abdullah et al., 2007; Jamaludin et al., 2012; Kabir Hassan et al., 2010; Reza et al., 2012; Saad et al., 2010). Hence, this study chooses Malaysia as the sample population, and Islamic equity mutual funds are the unit of analysis. The attention is on the influence of total ownership cost on mutual fund performance for Islamic equity mutual funds.

This study analyzes the performance of mutual funds from the year 2008 up to 2020. This research also fulfill the gaps by scrutinizing the variable factors that influence total ownership cost and its mediating relationship between before-fee performance, market timing ability, and fund governance on total ownership cost and performance.

# 1.9 Definitions of the Study Variables

Table 1.4 presents the operational definitions of each variable used in this study.

Table 1.4 Operational Definition of Each Variable

Variable	Operational Definition
Mutual fund	The variable signifies the total return of an asset or
performance	a collection of investments over a specified
	assessment period.
Total ownership cost	The variable describes the total costs or expenses to
	be incurred to potential mutual fund investors.
Before-fee	The variable describes the role of the before-
performance	expense return of mutual funds on investors'
	sensitivity.
Market timing ability	The variable implies the ability of a fund manager
	or an investor to perform market timing skills.
Fund governance	The variable relates to the control arrangement,
	which includes managing mutual funds, direction,
	and regulation.
Market return	The variable denotes a standard measurement
benchmark	instrument used as a comparison to the performance
	of a security.

## 1.10 Organization of the Study

Chapter one of this study presents the research background where it outlines the interesting phenomenon of mutual fund performance and total ownership cost, particularly on the fees charged. The variables that influence both mutual fund performance and total ownership cost are being identified and analyzed. Before-fee performance is considered relevant information for any future selection purposes, including in this mutual fund context. Subsequently, the control structure of the mutual funds also raises the question of whether the governance of the funds affects total ownership and its performance. Since fund managers are the important individuals who manage the funds, their skills become a valid factor influencing the costs charged and the fund's performance. Fund managers' market timing ability may also affect the fund performance. A standard measurement tool will also be analyzed to compare the mutual fund performance against a market return benchmark.

In this chapter, the research context was introduced where Malaysia is chosen due to the lack of studies on the phenomenon selected and attributable to the growing demand for Islamic mutual funds in Malaysia. This chapter then proposes the research questions and objectives on whether there is a significant affiliation between before-fee performance, market timing ability, and fund governance on mutual fund performance and total ownership cost. Lastly, the chapter discusses the practical and theoretical value of the research, the scope, the variables definitions, and the organization of the study.

Chapter two describes the theories associated with the study, including several theories such as efficient market theory, asset pricing theory, transaction cost theory, agency theory, and performance theory. Then, this chapter will present a review of the literature and related study allied with the problem referred to in this study. All variables and their relationships will be explained explicitly along with the development of the hypothesis. In the end, a theoretical framework will be constructed to portray all relevant connections.

Chapter three explained the methodology and procedures employed for the data collection and analysis. The chapter began with the research paradigm and design used in the study, followed by variables and measurement. The conceptual framework and hypotheses that satisfy the research objectives are clearly stated. Then, the reliability and validity data inclusive of several robustness tests are being discussed. Following that, the data collection technique is discussed, the models to be created, and the equations for each model.

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