



## CYCLING IN BURSA MALAYSIA: EVIDENCE FROM ISLAMIC AND NON-ISLAMIC PORTFOLIOS

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### Abstract

*The main objective of this research is to examine the relative performance between the Islamic portfolio (IP) and non-Islamic portfolio (NIP) during the bullish and bearish phases of the economic cycle in Bursa Malaysia over the examination period from 1 January 2006 to 1 January 2020 (a total of 168 months). The test is conducted by regressing the monthly excess returns of the IP and the NIP on the monthly returns of the market risk premium factor in the bullish phase with dummy variables, and also on the monthly returns of the market risk premium factor in the bearish phase with dummy variables. It is evident from the results that the relative performance between the IP and NIP during the bullish and bearish phases of the economic cycle in Bursa Malaysia is close. Therefore, this research cannot claim that during a bearish period, IP risk management as measured by beta, performs better than NIP, and vice versa during a bullish period.*

*Keywords: Islamic Portfolio, Non-Islamic Portfolio, Economic Cycle, Bursa Malaysia*

### INTRODUCTION

Market bubbles are well-known, and even though there are several lessons to be learned from previous bubbles, investors are nonetheless drawn in each time a new one emerges. According to Korkmaz, Bari and Adalı (2021), the market bubble for a stock is trading it at a higher price than its fundamental value, the authors also asserted that reasonable bubbles occur when the long-run relationship between stock prices and dividends disappears, or when stock prices rise steadily over long periods. Many studies have demonstrated that if stock markets are efficient, their prices reflect underlying economic dynamics, as a result, news



about the current or future growth of actual economic activity should cause financial markets to respond (Candelon & Metiu, 2011; Yuksel & Bayrak, 2012). While Hamilton and Lin (1996) revealed that stock market downturns occur before economic recessions, and stock market upswings occur before business cycle expansions. Therefore, indices are potential leading indicators of economic activity that may be used to forecast economic activity.

Over the medium term, the business cycle, which reflects fluctuations in growth and decline in economic activity, can be a key factor in stock sector performance (Emsbo-Mattingly et al., 2021). It is a widely held opinion that the financial market's stock price volatility is a reliable predictor of the imminent direction and reversal of the business cycle (Tran, 2022). However, there are some commodities whose demand is inelastic, meaning that the need for them does not change with the changes in the business cycle. Examples include life-saving medication, electricity and gasoline. The business cycles in the economy are brought on by inconsistent governmental actions and the unpredictable pattern of several local and global variables and forces (Gulzar & Kalim, 2022). Hence, business cycles have an impact on the stock markets and economic activity.

Li, Yan and Wei (2021) investigated how the monetary policy cycle, financial cycles (including credit, housing, and stock market cycles), and business cycle in China have cyclical characteristics and dynamic spillovers. Following the global financial crisis of 2007/2008, the authors found that the stock market cycle has replaced the business cycle as the primary risk transmitter. Thus, accurately predicting a market's direction may considerably boost an investor's profits. It is worth mentioning that the stock market cycle is a term that indicates changes in the stock price pattern, and is usually related to business cycles. Cycles in stock prices are commonly described by the terms "bull markets" and "bear markets". The market cycle period might be months or years. The ups and downs in stock markets usually bring about certain unfavorable developments that prevent the country's stock markets from operating efficiently (Hossin & Islam, 2019). Thus, if investors want to optimise their investing or trading profits, they should understand stock market cycles.

According to Arshad (2016), who studied stock market volatility in Malaysia, Islamic stock indices are more volatile during periods of economic decline and less volatile during periods of economic expansion. Islamic investment differs from conventional investment in that it must comply with Islamic law known as *Shariah*. Investing in businesses that deal in or produce goods that violate *Shariah*, such as alcohol, pork, tobacco, pornography, and gambling, or in financial products with fixed interest rates, like bonds, preferred stocks, and options, as well as any other action deemed immoral, is not permitted in Islamic investment, regardless of the investors are Muslim or not (Rohuma, 2023).

With less than 1% of the worldwide financial market, the Islamic financial services sector is still tiny compared to the global financial services industry (Montgomery & Masson, 2016; IMF, 2017). According to the 2023 report issued by the Islamic financial services board in 2023, the global Islamic financial services industry displayed strength and resilience despite severe global financial conditions in 2022. With structural development, the industry was valued at USD 3.25 trillion (IFSB, 2023). However, despite its small size in the global financial services industry, the high growth of the Islamic financial services industry shows there is considerable potential for this industry to grow globally. Alam et al. (2020) indicated that the Islamic financial services sector has grown by 10-12% each year over the past 20 years. Similarly, according to the S&P Global Rating report issued in 2024, the total assets of the Islamic financial sector worldwide are still increasing. After growing by 8% in 2023, S&P Global Ratings expects high single-digit growth in 2024–2025 (Damak, 2024). Aside from that, Islamic finance had fast growth in 2020, with total assets rising 10.6% despite the COVID-19 pandemic and falling oil prices (Damak, 2022).

This research examines the relative performance between the Islamic portfolio (IP) and non-Islamic portfolio (NIP) in Bursa Malaysia during the bullish and bearish phases of the economic cycle in Bursa Malaysia over the examination period from 1 January 2006 to 1 January 2020. To ensure that all variables are completely independent, the researcher chose NIP instead of a conventional portfolio, since Islamic stocks are part of the conventional portfolio. Therefore, the main question of this research is: How does the performance of Islamic and non-Islamic portfolios differ in Bursa Malaysia during different economic cycles?. Bursa Malaysia is a well-regulated market with a variety of financial and investment facilities and data accessibility and simultaneously operates conventional and Islamic capital markets; hence, it was chosen for this study.

## LITTERATEUR REVIEW

The stock markets in Malaysia and USA have been significantly harmed by the uncertainty of global economic policy (Hoque & Zaidi, 2020; Arouri et al., 2016). Yang & Jiang (2016) indicated that uncertainty has a significant and beneficial effect on the Chinese stock market. While Mora (2019) revealed that Thailand's stock market returns were significantly impacted by both economic and political volatility before 2010, these effects decreased significantly after 2010. Maheu and McCurdy (2000) apply a Markov regime-switching model with duration dependence. In this instance, bull and bear markets are defined as high-return, stable states and low-return, volatile states, respectively. The best market gains are found to occur at the beginning of a bull market, and the stock market is found to spend 90% of its time in bull markets. Also, Yan et al. (2007) use the B–B method to detect bull and bear market cycles in China for the two Chinese stock

exchanges from 1991 to 2006, noting that the Chinese stock market cycles are quite prominent but have reduced as the market has matured. While Hamilton and Lin (1996) concluded that economic recessions are the main cause of changes in the volatility of stock returns.

LU et al. (2023) examined the forecasting power of oil shocks for volatility in the global stock market. This study thoroughly examines how oil shock metrics affect the volatility of the S&P 500 index. The results revealed that, in addition to traditional economic factors and uncertainty indices, several oil shock measures provide useful information for anticipating volatility in the stock market. Robustness checks conducted under various market and business cycle scenarios, including the COVID-19 pandemic, validate these results.

On the other hand, many researchers have demonstrated that Islamic portfolios outperform conventional portfolios in a bearish period, while conventional portfolios outperform Islamic portfolios in a bullish period (Abdullah et al., 2007; Merdad et al., 2010). Moreover, Dewi and Ferdian (2009) and Ahmed (2009) claimed that Islamic finance could deal with the financial crisis more effectively than its conventional counterpart. During the global financial crisis in 2007/2008, Islamic banks were more stable than conventional banks (Zehri et al., 2012). Askari et al. (2010) observe that no major Islamic bank has gone bankrupt in the last three decades. This stability may have motivated investors to focus more on Islamic investments compared to conventional investments as the majority of some Islamic institutions' clients were non-Muslim (PricewaterhouseCoopers Malaysia, 2008, cited in Krasicka & Nowak, 2012:4).

On the other hand, Hayat and Kraeussl (2011) concluded that Islamic equity mutual funds underperformed their Islamic and conventional benchmarks during the global financial crisis (GFC). Moreover, Al-Khazali et al. (2016) concluded that during the GFC, Islamic indices and their conventional counterparts showed a similar level of efficiency. Besides, the reaction to major volatility shocks in Islamic equities was comparable to the reaction of conventional equities (Hkiri et al., 2017). According to Arshad and Rizvi (2013) and Arshad (2016), when the economy is in a downturn, Islamic stock indices are more volatile than their conventional counterparts, but they are less volatile when the economy is booming. Quite the contrary, Islamic stock indices, according to Girard and Hassan (2008), exhibited more consistent tendencies during times of crisis than their conventional counterparts. Gulzar and Kalim (2022) investigated the relationships between real business cycles, Islamic stock indices, and certain macroeconomic factors in Pakistan, Indonesia, and Bangladesh. By adopting the Panel ARDL approach, the results showed that the volatility of the Islamic stock indices is mostly explained by real economic cycles. Moreover, the Islamic stock indices are less volatile during economic growth and stagnate during a recession. The findings supported the significance of the Islamic stock market might be used as a key instrument to boost economic stability.

In their study, Kim and Sohel Azad (2022) examined the relationship between macroeconomic risk and low-frequency volatility of Islamic and conventional stock markets from 36 countries, representing emerging, developed and Islamic countries over the period from 2000 to 2016. According to the study, countries that practice Islam had reduced low-frequency market volatility. In line with Gulzar and Kalim (2022), Kim and Sohel Azad (2022) suggested that religion affects how market volatility is corrected, and investors may want to consider investing in Islamic equities to diversify their risks.

Using monthly data for the period from 2011 to 2021, Adam et al. (2022) examined the effects of uncertainty and volatility on the returns of 10 Islamic stocks. Applying the continuous wavelet transform and wavelet coherence ratios, the results were that (1) except for the Dow Jones Islamic Market, economic policy uncertainty has a negative impact on the majority of Islamic stock returns; (2) the majority of Islamic stock returns among different countries are significantly impacted favorably by volatility; and (3) the Islamic stock returns post-COVID-19 outbreak are affected significantly by economic policy uncertainty and volatility.

This research differs from others as it examines the relative performance between the Islamic portfolio (IP) and non-Islamic portfolio (NIP) during the bullish and bearish phases of the economic cycle in Bursa Malaysia over the examination period from 1 January 2006 to 1 January 2020 (*a total of 168 months*). Thus, the null hypothesis of this research is:

*H<sub>0</sub>: IP and NIP exhibit the same fluctuations in their return on Bursa Malaysia in different economic regimes.*

While the alternative hypothesis is:

*H<sub>1</sub>: IP and NIP exhibit different fluctuations in their return on Bursa Malaysia in different economic regimes.*

## **METHODOLOGY**

### **Research Design**

The main objective of this research was to examine the performance of both IP and NIP in Bursa Malaysia, with an emphasis on spotting cyclical trends and the investment implications that follow. For this, a descriptive research design was adopted.

### **Data**

The data of this research was obtained mainly from the database accessed through a subscription from the Taiwan Economic Journal (TEJ) and Bursa Malaysia. Since daily and weekly data contain a significant amount of random white noise, the research uses monthly data

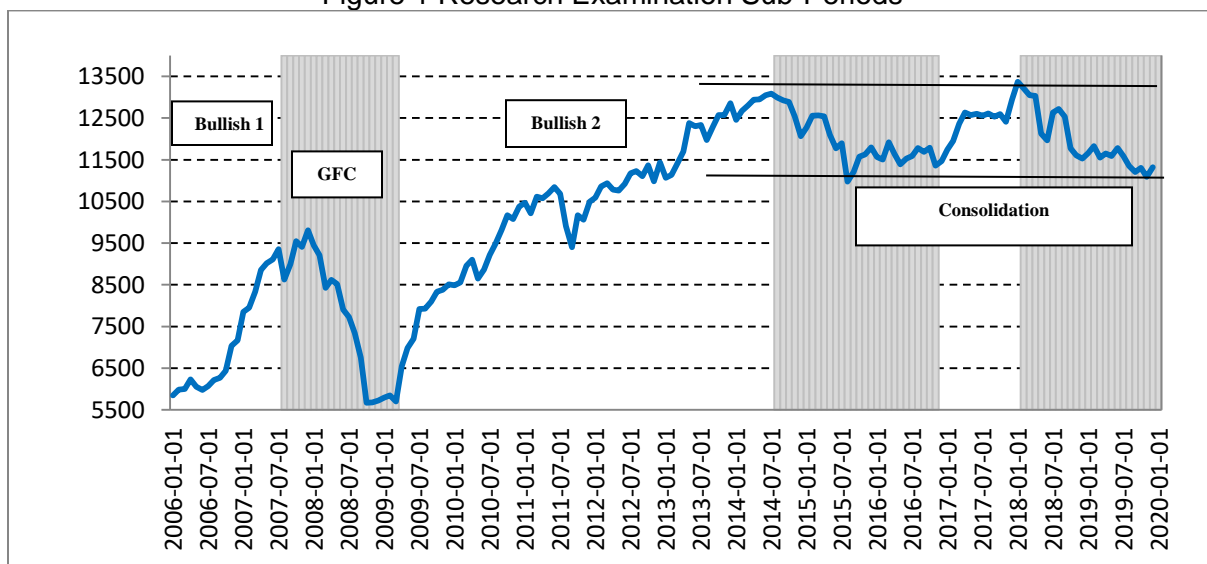
(Mun et al., 2000). The return of a stock is estimated by calculating the return on investment (ROI), which is obtained from the TEJ database.

To determine whether a stock in the database is Islamic or not, this research uses the Islamic securities list report issued by the Securities Commission of Malaysia (SC). Any company that is listed on this report is considered as Islamic and any that is not is considered non-Islamic. Except for 2006, when it was released at the end of April and October, this report was released at the end of May and November during the research period that ran from from 1 January 2006 to 1 January 2020 (for more details see <https://www.sc.com.my/development/icm/shariah-compliant-securities/list-of-shariah-compliant-securities>). It is worth mentioning that according to the Securities Commission of Malaysia report issued in May 2024, the majority of stocks listed in Bursa Malaysia are Islamic stocks. (Securities Commission of Malaysia, 2024).

### Examination Period

As mentioned earlier, the research's entire examination period spans from 1 January 2006 to 1 January 2020. Followed Rohuma (2022), the examination period is divided into many sub-periods. These sub-periods are distinguished by the notable historical turning points of the FTSE Bursa Malaysia EMAS index. The index experiences either upward or downward trends at these turning points. The primary rationale behind selecting this index for the sub-period determination is its representation of all listed companies in Bursa Malaysia, irrespective of their size (Russell FTSE, 2024). These sub-periods—the bullish 1 period, the global financial crisis period (GFC), the bullish 2 period, and the consolidation period—are depicted in Figure 1.

Figure 1 Research Examination Sub-Periods



The four sub-periods of this research are as follows:

***Bullish 1 Period (1 January 2006–30 June 2007)***

The FTSE Bursa Malaysia EMAS index performance trended upward. During these eighteen months, the market was bullish and remained so until the global financial crisis (GFC) broke out.

***Global financial Crisis Period (1 July 2007–28 February 2009)***

The GFC caused the index to decline following the first bullish period. A crisis market characterized this 20-month era. Due to the overlap and interconnection of nations' economies, Malaysia suffered economic harm during the GFC along with other nations.

***Bullish 2 Period (1 March 2009–30 June 2014)***

By the end of the GFC, the index had recovered and begun an uptrend. These 64 months were defined by a robust bullish market.

***Consolidation Period (1 July 2014–1 January 2020)***

When the index's movement started to consolidate, this period began. around 11,500, the index found solid support, and around 13,000, it encountered quite strong resistance. The consolidation period was characterised by the flat index movement between the resistance and support levels, and limited downside and upward movement of the index. However, this 66-month period had three minor movements, namely (1) the minor bearish period, which is from 1 July 2014 to 30 October 2016 (28 months); (2) the recovery period, which is from 1 November 2016 to 31 December 2017 (14 months); and (3) the second bearish period, which is from 1 January 2018 to 1 January 2020 (24 months). It should be noted that the recovery period was not called a bullish period since the market was slow and lacked strong momentum.

For the purpose of this study, these four periods are divided into two main periods: (1) the bullish period, which includes the bullish 1 period, the bullish 2 period, and the recovery period (a total of 96 months), and (2) the bearish period, which includes the GFC period, the minor bearish period, and the second bearish period (a total of 72 months).

## **Statistical Method**

The two portfolios that are constructed in this research are as follows:

1. The IP: the IP refers to a portfolio that consists of all Islamic stocks in the research data.
2. The NIP: the NIP refers to a portfolio that consists of all non-Islamic stocks in the research data.

The monthly arithmetic return is employed to compute the portfolio's return. As mentioned earlier, the SC issues the list of *Shariah*-compliant stocks semi-annually, mostly at the end of May and November over the research examination period. As a result, this research

rebalanced the hypothetical portfolios on 1 June and 1 December immediately after the *Shariah*-compliant lists were released.

The test is conducted using the statistical analysis *STATA 12* software, by regressing the monthly excess returns of the IP and the NIP on the monthly returns of the the market risk premium factor (MRP), in the bullish phase with dummy variables, and also on the monthly returns of the MRP factor in the bearish phase with dummy variables. It is worth mentioning that MRP equal to the market portfolio return minus the risk-free proxy return. The exposure of the excess return of the IP is estimated in Equation 1:

$$(r_{IP,t} - r_{f,t}) = a + b_{IP,bull}MRP.D_1 + b_{IP,bear}MRP.D_2 + \varepsilon_{IP,t} \dots \dots \dots (1)$$

Where,

$r_{f,t}$  : is the monthly average returns of the risk-free proxy in month  $t$ ;

$r_{IP,t} - r_{f,t}$  : is the excess return of the IP in month  $t$ ;

$D_1$  : are the first dummy variables, take a value of 1 in bullish months and take a value of 0 in bearish months;

$b_{IP,bull}$  : is the factor loading on the MRP that measures the sensitivity of the IP excess return to the MRP in the bullish period;

$D_2$  : are the second dummy variables, take a value of 0 in bullish months and take a value of 1 in bearish months;

$b_{IP,bear}$  : is the factor loading on the MRP that measures the sensitivity of the IP excess return to the MRP in the bearish period; and

$\varepsilon_{IP,t}$  : is the regression error term that represents an unsystematic risk for the  $(r_{IP,t} - r_{f,t})$  in month  $t$ .

While the exposure of the excess return of the NIP is estimated as follows in Equation 2:

$$(r_{NIP,t} - r_{f,t}) = a + b_{NIP,bull}MRP.D_1 + b_{NIP,bear}MRP.D_2 + \varepsilon_{NIP,t} \dots \dots \dots (2)$$

Where,

$r_{NIP,t} - r_{f,t}$  : is the excess return of the NIP in month  $t$ ;

$b_{NIP,bull}$  : is the factor loading on the MRP that measures the sensitivity of the NIP excess return to the MRP in the bullish period; and

$b_{NIP,bear}$  : is the factor loading on the MRP that measures the sensitivity of the NIP excess return to the MRP in the bearish period.

According to Hsieh and Hodnett (2011), constructing a market proxy from available sample stocks is essential to conduct a fair evaluation of portfolios that are constructed from the same pool of sample stocks. Therefore, this research constructed a portfolio that consists of all stocks in the research data and considered it as a market proxy. On the other hand, the 3-



month Islamic interbank rates are employed as a risk-free proxy in Equation 1, while the 3-month Bank Negara –central bank of Malaysia- Treasury bills rates are employed as a risk-free proxy in Equations 2. Furthermore, before estimating the regression analysis, all attributes employed in constructing the variables are logged.

To ensure that the results are unbiased, the unit root, heterokedasticity, and autocorrelation biases are investigated by adopting the Augmented Dickey-Fuller (1981) test (ADF), the Breusch-Pagan (1979), and Durbin's alternative tests (Durbin, 1970), respectively. The null hypothesis for the ADF test is  $H_0$ : the time series has a unit root, whereas the alternative hypothesis is  $H_1$ : the time series has no unit root. The null hypothesis for the Breusch-Pagan (1979) is  $H_0$ : the regression residuals are not heteroskedastic when compared to the alternative hypothesis of  $H_1$ : the regression residuals are heteroskedastic. Lastly, the null hypothesis for Durbin's alternative test is  $H_0$ : the residuals of the regression are not serially correlated, while the alternative hypothesis is  $H_1$ : the residuals of the regression are serially correlated. The significance of these tests is at a 5% level. Since the results of these tests revealed, in the results section, that all residuals had only a heteroskedastic bias. Thus, the robust standard errors regression is used to correct the heteroscedastic bias. The adjusted R-squared for the robust standard errors regression is derived from the OLS regression approach.

## RESULTS

As mentioned earlier, the unit root, heteroskedasticity, and autocorrelation biases are investigated by adopting the ADF, the Breusch-Pagan (1979), and Durbin's alternative tests, respectively. Table 1 displays the results of the ADF, Breusch-Pagan (1979), and Durbin's alternative tests of the excess return of the IP and the NIP.

Table 1 Results of the ADF, Breusch-Pagan (1979), and Durbin's alternative tests for IP and NIP  
**Unit Root Test**

	ADF Test					
	Intercept only		Intercept and Trend		No Intercept and No Trend	
	Critical Value 5%	ADF Test stat.	Critical Value 5%	ADF Test stat.	Critical Value 5%	ADF Test stat.
IP-Rf	-2.887	-10.899	-3.444	-11.756	-1.950	-11.163
NIP-Rf	-2.887	-11.870	-3.444	-12.941	-1.950	-12.651

**Heteroskedasticity and Autocorrelation Tests**

	Breusch-Pagan (1979) Test		Durbin's alternative Test	
	Chi <sup>2</sup>	Probability	Chi <sup>2</sup>	Probability
<b>IP-Rf</b>	4.390	0.036*	1.436	0.300
<b>NIP-Rf</b>	27.890	0.000*	0.791	0.854

Note: \* significant at 5%

The results of the ADF test in Table 1 indicate that all ADF absolute values of all data are bigger than their respective critical values at a 5% level. Therefore, the null hypothesis is rejected, so there is no unit root in the data, and the time series is stationary. The results from the Breusch-Pagan (1979) test in the same table affirm that the p-values of all data are less than 5%. Thus, the alternative hypothesis is accepted, which states that the residuals are heteroskedastic. On the other hand, the results of Durbin's alternative test in the table indicate that all data have p-values larger than 5%. Consequently, the null hypothesis cannot be rejected, which means that the residuals are not serially correlated. On the other hand, the results of the cyclicity for the IP and the NIP are presented in Table 2.

Table 2 Cyclicity Results for the IP and NIP

	<b>IP</b>	<b>NIP</b>
Prob. > F	0.000	0.000
$R^2$	0.995	0.919
Adj.- $R^2$	0.995	0.918
Intercept	-0.001	0.000
t-Stat	-3.950	-0.370
P. Value	0.000	0.714
Bullish Period	0.976	1.024
t-Stat	61.92	32.73
P. Value	0.000 <sup>***</sup>	0.000 <sup>***</sup>
Bearish Period	1.030	1.078
t-Stat	100.81	27.45
P. Value	0.000 <sup>***</sup>	0.000 <sup>***</sup>

Note: <sup>\*\*\*</sup> significant at 1%.

The results of the Table 2 clarify that the  $R$ -squared of the IP and NIP are 0.995 and 0.919, respectively, with p-values equal to 0.000 for both portfolios. Accordingly, at least 91.9% of the variation in the IP and NIP can be explained significantly at a 1% level by the variation of

the independent variables. Furthermore, the adjusted R-squared values are equal or almost equal to the R-squared values, therefore, this regression is sound. In terms of the abnormal return (alpha coefficient), only the IP has a significantly negative abnormal returns (p-value = 0.000). On the other hand, the NIP has no abnormal return (p-value = 0.714).

The results in Table 2 also reveal that the sensitivity of the excess return of the IP and the NIP to the MRP is close, whether in the bearish period or the bullish period. In the bullish period, with p-values less than 5%, the beta coefficients for the IP and NIP are 0.976 and 1.024, respectively. Thus, with each 10% increase in the MRP, the return of the IP increases by 9.76%, while the return of the NIP increases by 10.24%. Therefore, the NIP would benefit slightly more in the bullish period compared to the IP. However, the difference between the two betas is not notable.

In the bearish period, the beta for both types of portfolios is expected to be low, however, it is evident from the results that the beta coefficients for the IP and the NIP are 1.030 and 1.078, respectively (p-values less than 5%), which are bigger than their values during the bullish period. These results are consistent with Ismaila and Shakranib (2003), who found that the beta in bearish periods is higher than the beta in bullish periods. While Rohuma (2022) found that the beta in the global financial crisis 2007/2008 is lower than its value in bullish periods. The high beta can be considered a risky situation for both kinds of portfolios. Since, with each 10% fall in the MRP, the return of the IP falls by 10.30%, while the return of the NIP falls by 10.78%. As a result, the IP generates a lower beta than the NIP, and hence, it could be stated that the risk performance (as measured by beta) of the IP is better than the risk performance of the NIP during the bearish period but worse than the market since the beta of the market is equal to 1. However, the difference in the beta between the IP and the NIP is negligible. Therefore, it cannot be inferred from the results that the risk performance of the IP is significantly better than the risk performance of the NIP during the bearish period.

Accordingly, this research accepts the null hypothesis, which states that IP and NIP exhibit the same fluctuations in their return on Bursa Malaysia in different economic regimes. The higher beta in bearish period may suggest that the portfolios' sensitivities to market movements tend to increase amidst economic recessions. Also, this increase suggests some links with behavioral finance theory, where investors' responses towards negative news and downswings exceed those pertaining to positive news items. Furthermore, in bearish period when liquidity is reduced and market volatility goes up, such changes may cause individual securities' moves to be blown out of proportion compared to the market.

The results of the investigation affirm that the risk performance of the IP, as measured by the beta coefficient, is close to the risk performance of the NIP in the bullish and bearish periods. Thus, this research could not assert that the risk management of the IP outperforms the risk management of the NIP during the bearish period, and vice versa in the bullish period. Due to the Islamic stocks' dominance in Bursa Malaysia, which shows how the Islamic stocks drive the performance of the market, it is likely that the performance of the non-Islamic stocks is influenced to some extent, by the performance of the Islamic stocks. Unlike Abdullah et al. (2007), Alwi et al. (2019), and Tahir and Ibrahim (2020), this study was unable to provide any strong evidence that the IP beats the NIP during a bearish phase, and vice versa during the bullish period. Thus, the findings are consistent with a large body of other research (Setiawan & Oktariza, 2013; Listyaningsih & Krishnamurti, 2015), which revealed no differences in the performance of the IP and the NIP.

Furthermore, Kim and Sohel Azad (2022) revealed that countries that practice Islam have reduced low-frequency market volatility, and Gulzar and Kalim (2022) suggest that investors may consider investing in Islamic equities to diversify their risks. Similarly, Adam et al. (2022) found that investors should re-evaluate their investments in order to fully take advantage of Islamic stock markets. Girard and Hassan (2008) emphasised that Islamic stock indexes showed a steadier tendency during times of crisis than their conventional equivalents. However, the study's findings did not agree with these assertions since there was an insignificant difference in the performance between the IP and NIP during the bullish and bearish economic cycles in Bursa Malaysia. On the other hand, this study agrees with the study of Al-Khazali et al. (2016) that during the GFC the Islamic indices and their conventional counterparts have shown a similar level of efficiency. Also, the results of this study are in line with the results of the Hkiri et al. (2017) study, as the response to volatility shocks in Islamic stocks was comparable to the response in conventional stocks. Therefore, the results of this research accept the alternative hypothesis which stated that the volatility of Islamic and non-Islamic portfolios shows similar fluctuations in Bursa Malaysia in different economic regimes.

To sum up the results, regardless of the limitations forced by *Shariah* principles, IPs demonstrated a resilience that was comparable to that of NIPs. This could be an indication that both portfolios are managed in the same way. If highly skilled investment managers are situated in either of these portfolios, they can possibly achieve the same level of performance regardless of their preferred methodological approaches and/or the limitations posed by their investment beliefs during different economic regimes. This similarity in performance might also imply that these two kinds of portfolios respond similarly to macroeconomic conditions despite their adherence or non-adherence to *Shariah* laws.

## CONCLUSION

The main objective of this research is to examine the relative performance between the IP and NIP during the bullish phase and the bearish phase of the economic cycle in Bursa Malaysia over the examination period from 1 January 2006 to 1 January 2020. As the *Shariah*-compliant portfolio is part of the conventional portfolio, the researcher chose NIP over the conventional portfolio to ensure that all variables are completely independent. The bullish period consisted of a total of 96 months, while the bearish period consisted of 72 months. The test was conducted by regressing the monthly excess returns of the IP and the monthly excess returns of the NIP on the monthly returns of the MRP in the bullish and bearish periods with dummy variables.

The findings showed that the beta coefficients for the IP and the NIP in the bearish period were slightly higher than the beta coefficients in the bullish period. This can be considered a risky situation for both kinds of portfolios. On the other hand, the beta coefficients of the IP and the NIP in the bullish period and the bearish period were positive around 1 with p-values equal to 0. The differences in the beta between the IP and the NIP were not significant. Thus, both portfolios moved significantly in tandem with the MRP, at a level of 1%. Hence, as measured by beta, the difference in risk performance between the IP and the NIP in the bullish and bearish periods was not significant.

The results correspond with Hakim, Wardini and Wati's (2020) work, as they also found that there are no significant differences between the performance of IP and NIP in Indonesia stock market over the period from 2012 to 2019. Besides, Al-Khazali, Leduc and Alsayed (2016) concluded that in a bearish market, the Islamic indices have shown the same level of efficiency as their conventional counterparts. This is supported by Habibah, Oad Rajput and Iqbal. (2023). However, Asutay, Wang abd Avdukic (2022), and Audi, Sadiq and Ali (2021) asserted that during the financial crisis, the indices of the Islamic equity outperform their conventional counterparts.

## IMPLICATIONS

This research is considered a more in-depth study compared to other studies as it has assembled unique hypothetical IP and NIP over an extensive examination period of 14 years, covering different economic regimes. It aimed to investigate the effect of religious principles on the performance of portfolios consisting of stocks listed on Bursa Malaysia. Generally speaking, the results of this research support the idea that the investment strategy as opposed to the nature of the portfolio (Islamic vs. Non-Islamic) might be more significant in determining performance outcomes in Bursa Malaysia. The findings have practical implications that

investors can confidently choose between Islamic and non-Islamic portfolios regardless of performance differences across changing market conditions. This information is especially useful for those who are interested in diversification and risk management strategies when making investment decisions.

## RECOMMENDATIONS

1. Implement educational programs to educate investors on the risks and returns associated with different types of portfolios.
2. Generate investment strategies for portfolio managers in different types of portfolios.
3. It is advisable to support innovative financial products that appeal to both conventional and Islamic investors.
4. Examine how Islamic and conventional investment products can perform better thanks to financial technology, or fintech.

## FURTHER RESEARCH

1. Investigate whether similar results are observed when other stock exchanges in Muslim-majority countries are compared.
2. Extending the research timeframe to include more information through different economic cycles.
3. Examine particular sectors in Islamic and conventional portfolios to determine which sectors are responsible for the patterns that have been noticed.
4. Investigating whether portfolio managers' main motivations in constructing IP are economic or religious.
5. Future research may apply other data analysis methods.
6. Conduct the qualitative analysis to investigate investor behavior for conventional and Islamic portfolios and to analyse the effect of psychological biases on investor decision-making.

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