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DOES SHARIAH SCREENING IMPOSE A PERFORMANCE TRADE-OFF? EVIDENCE FROM LARGE-CAP PORTFOLIO STRATEGIES IN MALAYSIA

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ABSTRACT

This study examined whether restricting the investable universe to Shariah-compliant equities was associated with a performance trade-off in the Malaysian equity market. Using monthly data from December 2000 to December 2023, the analysis compared unrestricted, non-Shariah, and Shariah stock universes. Within each universe, firms were ranked by market capitalisation, the 30 largest stocks were retained, and three portfolios were formed. They were value-weighted, equal-weighted, and a 10-stock dividend-yield portfolio drawn from the same top-30 group. Performance was evaluated using average return, compound return, the Sharpe ratio, the Treynor ratio, and Fama-French three-factor alpha. Pairwise differences in alphas and Sharpe ratios were formally tested using Newey-West HAC-adjusted long-short spread regressions and the Jobson-Korkie statistic with the Memmel variance correction. The evidence did not indicate a systematic performance trade-off associated with Shariah screening in the Malaysian large-cap segment. Across the full sample, dividend-yield portfolios produced the strongest results, with the non-Shariah dividend-yield portfolio leading on realised-return measures and the Shariah dividend-yield portfolio recording the highest factor-adjusted performance. Formal pairwise tests showed that within each universe, the dividend-yield rule significantly outperformed both value- and equal-weighted portfolios. Across universes, the Shariah and non-Shariah dividend-yield portfolios did not differ significantly. The same distinction remained visible in the later sub-period, even though market conditions were weaker. Additional tests based on alternative portfolio formation months showed that the main results were not driven by the January formation convention. Overall, the findings revealed that relative performance varied with the screen that defined the investable universe, the portfolio construction rule, and the performance measure used in the evaluation.

Keywords: Shariah screening, constrained investing, portfolio performance, large-cap portfolio strategies, dividend yield.

INTRODUCTION

A central question in constrained investing is whether investors incur a financial cost when they accept binding restrictions on the assets they may hold. The issue extends beyond explicitly ethical or religious mandates. Once the feasible investment set is narrowed, portfolio performance must be assessed within that restricted opportunity set rather than against the market as a whole. In Islamic equity investing, this question is especially important because Shariah compliance operates as an explicit investment constraint with direct implications for portfolio choice and performance evaluation (Boudt et al., 2019; Trabelsi et al., 2020).

Shariah screening matters because it changes the investable universe before portfolio construction begins. Boudt et al. (2019) describe this process as involving two distinct decisions. Investors first determine which securities are admissible and only then assign portfolio weights within the eligible set. Raza (2021) shows why this first stage is economically meaningful. Shariah-compliant portfolios are formed through qualitative screens based on business activity and quantitative screens based on financial characteristics such as leverage, liquidity, and interest-related income. In Malaysia, these restrictions carry institutional significance because compliance status is determined through a formal screening framework and periodic review. Therefore, Shariah status has direct relevance for investment decisions in the Malaysian market setting (Hussain et al., 2023; Raza, 2021).

The conventional concern is that a narrower universe reduces diversification and excludes profitable opportunities. In the Malaysian setting, this concern appears directly in the view that Shariah-compliant portfolios may face a diversification cost because they cannot hold the full range of listed equities (Kamil et al., 2021). However, the literature does not support the simple presumption that screening must weaken performance. A screened universe may also contain firms with different financial characteristics, risk exposures, and pricing behaviour. Qoyum et al. (2021), for example, report that more intensive screening is associated with stronger alpha in their setting. Zaremba et al. (2020) show that Shariah-compliant and non-compliant stocks differ in ways that matter for pricing and factor exposure. Trabelsi et al. (2020) likewise find that performance differences between Islamic and conventional portfolios are not always statistically decisive. The effect of screening is not self-evident; therefore, it must be resolved empirically.

The issue just highlighted cannot be separated from portfolio construction. Once the admissible universe has been defined, realised outcomes depend on the rule used to select and weigh the eligible stocks. Boudt et al. (2019) show that weighting rules affect both portfolio characteristics and risk-adjusted performance in a Shariah-restricted setting. Raza (2021) reaches a related conclusion from the screening side by showing that alternative screening methodologies alter sector exposure, factor exposure, turnover, and subsequent performance. The implication is straightforward. Accordingly, an assessment of the cost of Shariah screening should consider both the screening restriction and the portfolio rule applied within the screened universe.

This point is especially relevant in large-cap dividend strategies. The dividend-yield literature has generally relied on a large-cap parent universe, a transparent ranking rule, and periodic rebalancing. Filbeck and Visscher (1997) form an equally weighted portfolio of the ten highest-yielding stocks in the FTSE 100. Visscher and Filbeck (2003) apply a similar rule to the Toronto 35 and treat dividend yield as a value signal. Rinne and Vähämaa (2011) revisit the strategy in Finland and evaluate it using a broader set of risk-adjusted measures, while Ahmad et al. (2017) extend the same basic design to several Asian markets, including Malaysia. More recently, Halim and Sukor (2025) examine whether dividend-based sorting is associated with abnormal performance in a Shariah setting. This literature provides a clear basis for focusing on large-cap stocks and for treating dividend yield as a portfolio formation rule with an established empirical record.

Malaysia provides an appropriate setting in which to examine this issue. Hussain et al. (2023) describe Malaysia as a well-developed Islamic capital market, and the domestic screening framework gives Shariah classification direct relevance for investment decisions. The Malaysian market also permits a within-market comparison of unrestricted, non-Shariah, and Shariah portfolios under a common institutional environment. This design reduces the risk of confounding screening effects with cross-country differences in regulation, market structure, or investor base. Mat Nor et al. (2020) further note that the domestic screening framework is subject to formal review cycles and carries information content for investors. These features make Malaysia a suitable setting in which to isolate the performance implications of Shariah screening.

Against this background, the study asks whether Shariah screening imposes a performance trade-off in Malaysian large-cap portfolio strategies relative to comparable non-Shariah and unrestricted portfolios. Using monthly data from December 2000 to December 2023, the analysis compared three stock universes: unrestricted stocks, non-Shariah stocks, and Shariah stocks. Within each universe, firms were ranked by market capitalisation, the 30 largest stocks were retained, and three portfolios were formed from that set: a value-weighted portfolio, an equal-weighted portfolio, and a 10-stock dividend-yield portfolio composed of the highest-yielding names within the same top-30 group. Performance was evaluated using average return, compound return, the Sharpe ratio, the Treynor ratio, and factor-adjusted performance based on the Fama and French three-factor model.

The evidence supports three main conclusions. First, the results do not indicate a systematic performance trade-off associated with Shariah screening in the Malaysian large-cap segment. Second, portfolio construction explains an important share of the variation in performance. Third, the interpretation of relative performance depends on whether it is based on realised-return measures or factor-adjusted measures. Accordingly, the effect of screening is best assessed jointly with the portfolio rule and the evaluation metric rather than in isolation.

This paper contributes in four ways. First, it examines directly whether screening itself is associated with weaker performance in a within-market setting. Second, it treats portfolio construction as part of the same question rather than as a secondary implementation choice. Third, it distinguishes between realised and factor-adjusted performance when assessing the cost of constrained investing. Fourth, it formally tests the comparative performance claims, using long-short spread regressions for alpha differences and the Jobson-Korkie-Memmel test for Sharpe ratio differences. Together, these features reframe the question from whether Shariah portfolios happen to underperform to whether any screening effect can be statistically distinguished from the portfolio-construction effect once both are evaluated within the same market. The remainder of the paper is organised as follows. Section 2 reviews the related literature. Section 3 describes the data, portfolio formation procedure, and performance measures. Section 4 presents and discusses the empirical results. Section 5 concludes.

LITERATURE REVIEW

Shariah-compliant equity investment is generally implemented through a two-step process in which the eligible universe is first defined through business and financial screens and the portfolio is then formed from the remaining securities. Islamic investing can thus be analysed as a constrained-portfolio setting in which the Shariah screening may affect diversification, sector composition, and the distribution of risk and return (Boudt et al., 2019; Raza, 2021). Even so, the literature does not support the view that a screened universe must necessarily produce inferior performance. Using Malaysian equities, Kamil et al. (2021) show that the presumed diversification cost of Shariah compliance is not uniform and does not mechanically translate into weaker portfolio outcomes. Related evidence points in the same direction. Sukor and Halim (2023) show that, in the United States, the relative performance of conventional and Shariah-compliant samples varies across market states, with the gap narrowing as crisis conditions approach. In Indonesia, Qoyum et al. (2021) report that an Islamic-SRI portfolio outperforms Islamic-only, SRI-only, and conventional counterparts. Zaremba et al. (2020) also present evidence consistent with partial segmentation by showing that Islamic factors explain the cross-section of Islamic stock returns better than broader market-wide factors. Overall, these studies indicate that the performance consequences of Shariah screening should be assessed empirically rather than just assumed.

That question cannot be separated from the way the screened universe is converted into a portfolio. Boudt et al. (2019) show that, even after the permissible universe has been identified, the choice of weighting method continues to matter for both financial performance and the portfolio-level interpretation of Shariah compliance. In their Shariah-restricted S&P 500 setting, fundamental weighting, equal weighting, and low-risk weighting all improve risk-adjusted performance relative to standard market-capitalisation weighting. Raza (2021) reaches a similar conclusion from a different angle. He shows that alternative screening methodologies generate economically meaningful differences in the size, composition, turnover, and performance of Shariah-compliant portfolios. Evidence from Malaysia confirms that the screening rules themselves carry real consequences. Rahim et al. (2020) find that the November 2013 revision of the Securities Commission's screening methodology, which introduced a 33% conventional-debt-to-total-assets benchmark, was followed by a faster speed of adjustment toward target leverage among Malaysian Shariah-compliant firms. Accordingly, the characteristics of Shariah-compliant investing depend materially on the rule used to construct the investable set. These studies suggest that any assessment of whether Shariah investing entails a performance trade-off must account for both the screening and the portfolio rule applied within the screened universe.

A related strand of the literature considers whether portfolios formed on the basis of dividend yield can outperform passive benchmarks. Here again, the evidence is conditional rather than uniform. Filbeck and Visscher (1997) report that the top-ten dividend-yield strategy was not especially effective in the United Kingdom, where any advantage was limited and not consistently sustained on a risk-adjusted basis. By contrast, Visscher and Filbeck (2003) show that the corresponding strategy performed well in Canada, producing stronger compound and risk-adjusted performance than both the Toronto 35 and the broader market benchmark. Rinne and Vähämaa (2011) provide further support from Finland, where the strategy generates positive abnormal returns and performs particularly well in market downturns, although part of the premium appears related to a winner-loser effect rather than to dividend yield alone. Later evidence clarifies the role of the parent universe. Chong and Luk (2010) show that a broad high-yield strategy performs poorly in Hong Kong, whereas the same idea produces positive returns when confined to blue-chip Hang Seng constituents. Ahmad et al. (2017) likewise find that a Dogs of the Dow strategy outperforms average market returns across several Asian markets, including Malaysia. Conversely, Kim (2021) shows that dividend yield predicts future returns more reliably when firms also possess a credible dividend reputation. Dividend yield, then, is not a signal with a constant return profile across settings. Its usefulness depends on the market, the quality of the underlying firms, and the context in which the yield is observed.

This reasoning becomes especially relevant in a Shariah setting because screening may alter the economic content of payout variables. Anwer et al. (2021) argue that Shariah screening restricts the investment universe through business and capital-structure filters and may, therefore affect payout behaviour through under-diversification, risk, governance, and debt-related channels. Their evidence supports this view. Using US data, they show that Shariah-compliant firms are more likely than non-compliant firms to make total payout, cash dividends, and repurchases, and that this greater payout propensity is associated with profitability, retained earnings, lower debt, and lower asset growth. More recent work also suggests that dividend-related abnormal performance within Shariah-compliant stocks is not pervasive across all portfolios; although neither is it absent, particularly among larger firms (Halim & Sukor, 2025). These findings imply that dividend yield within a Shariah universe should not be interpreted in the same way as dividend yield in an unrestricted market. This is because the screening process changes the characteristics of the firms from which the signal is drawn.

The Malaysian evidence gives this issue added relevance. Mat Nor et al. (2020) report that Malaysian Shariah-compliant firms appear to follow a long-term target payout and exhibit smooth dividend behaviour, while lagged dividend yield, firm size, sales growth, leverage, and market-to-book value help explain current dividend yield. Jamadar et al. (2024) likewise find that profitability, valuation, and board oversight are associated with dividend payout in Malaysian Shariah-compliant companies. Mohd and Zaharudin (2019) also report that dividend payout in Malaysia is positively associated with future earnings growth in four of the five dynamic models they estimate. This is consistent with the view that dividend decisions convey information about the future prospects of firms. More generally, Sinnadurai et al. (2021) show that dividend policy in Malaysia is shaped by local ownership and governance conditions, including the role of government-related shareholding. Therefore, standard signalling arguments do not fully capture the institutional setting in which payout decisions are made. This issue is important because a yield-based strategy is more likely to be informative when dividend behaviour follows a sufficiently stable pattern, and the Malaysian evidence suggests that such a pattern exists within the local Shariah universe.

The literature has established that Shariah screening can alter the investable universe, that weighting rules and screening methodologies can materially affect portfolio outcomes, that dividend-yield strategies perform well in some markets but not in others, and that payout behaviour differs across Shariah-compliant and non-compliant firms. What remains less settled is whether the effect often attributed to Shariah screening is in fact a screening effect in the strict sense, or whether it instead reflects the portfolio rule imposed within the screened universe and the criterion used to assess performance. This question is especially relevant in Malaysia, where Shariah classification has institutional force; its large-cap segment provides a natural setting for dividend-yield strategies, and earlier evidence already indicates that both screening and payout behaviour are economically meaningful. Against this background, the study compares value-weighted, equal-weighted, and dividend-yield portfolios across unrestricted, non-Shariah, and Shariah large-cap universes within the same market setting. Although this body of work establishes that both the screening and the weighting rule shape Shariah-portfolio outcomes (Boudt et al., 2019; Raza, 2021), it does not separate the two influences within a single market, nor does it test whether the comparative performance differences are statistically significant.

METHODOLOGY

Data and Sample Construction

The sample covers all stocks listed on Bursa Malaysia between December 2000 and December 2023. Monthly price, dividend, and market-capitalisation data were obtained from Datastream. The EMAS index return served as the market benchmark, the three-month Treasury bill rate as the risk-free rate, and the Fama-French market, size, and value factors were constructed from the Malaysian cross-section. Portfolios were formed from December 2000 onwards, and performance was evaluated over January 2001 to December 2023. Shariah status was taken from the official List of Shariah-Compliant Securities published by the Securities Commission Malaysia (SC) through its Shariah Advisory Council (SAC). The list was updated semi-annually, in April and October before 2007 and on the last Friday of May and November from 2007 onwards. At each formation date, compliance status was read from the list effective on that date, and intra-year reclassifications took effect at the next annual rebalance.

To avoid survivorship bias, the analysis included all stocks for the period during which they were actively listed, including those that were delisted before the end of the sample. Portfolio formation also relied strictly on point-in-time data. Market capitalisation, dividend yield, and Shariah status were observed at the formation date, and portfolios were evaluated using only forward returns from that date.

Portfolio Formation

The empirical design had two dimensions. The first was the investment universe. At each formation date, the eligible cross-section was divided into the following three groups: unrestricted, non-Shariah, and Shariah. The second was the portfolio rule. Within each universe, three portfolios were formed, as follows: value-weighted, equal-weighted, and dividend-yield. This 3×3 design supported direct within-market comparison across screening regimes under comparable portfolio rules.

Portfolios were constructed from the cross-section of stocks observed at the formation month-end. A stock was eligible for selection if its market capitalisation and closing price were positive and non-missing, and its annual dividend per share was observed and non-negative. Retaining firms with zero recorded dividends was necessary because the eligible universe had to include both payers and non-payers before the dividend-yield portfolio was selected from within it. Shariah status was read from the SAC list effective on the formation date.

Within each universe, eligible stocks were ranked in descending order by market capitalisation, and the 30 largest firms were retained. Let $U_{b,t}$ be the eligible universe for block $b \in \{ALL, NS, SH\}$ at formation date t, and let $J_{b,t}^{30} \subset U_{b,t}$ denote the top 30 firms by market capitalisation.

For the value-weighted portfolio, the formation-date weight of stock i is:

$$w_{i,b,t}^{VW} = \frac{MC_{i,t}}{\sum_{j \in T_{b,t}^{30}} MC_{j,t}}, i \in T_{b,t}^{30},$$

where $MC_{i,t}$ denotes the market capitalisation of stock i at date t. For the equal-weighted portfolio, the weight is:

$$w_{i,b,t}^{EW} = \frac{1}{N_{b,t}^{30}}, i \in T_{b,t}^{30},$$

where $N_{b,t}^{30}$ is the number of selected firms.

Dividend yield was measured at the formation date as annual dividends per share divided by the month-end closing price:

$$DY_{i,t} = \frac{DPS_{i,t}}{P_{i,t}},$$

where $DPS_{i,t}$ denotes the Datastream annual dividend-per-share measure and $P_{i,t}$ denotes the month-end closing price. The dividend-yield portfolio was formed by selecting the ten stocks with the highest values of $DY_{i,t}$ within $T_{b,t}^{30}$. These ten stocks were then equally weighted, such that:

$$w_{i,b,t}^{DY} = \frac{1}{N_{b,t}^{10}}, i \in D_{b,t}^{10},$$

where $D_{b,t}^{10} \subset T_{b,t}^{30}$ denotes the selected dividend-yield constituents. The dividend-yield strategy was, therefore implemented within a large-cap parent universe rather than across the full market. The procedure yielded nine portfolios in total; three portfolio rules within each of the three investment universes.

Return Construction

For each calendar start month, portfolios were formed using the cross-section observed at the end of the previous month and then tracked over the subsequent 12 monthly observations. If $t-1$denotes the formation month-end and $t$denotes the first month of the evaluation window, the return sequence runs from $t$through $t+11$. In the baseline specification, portfolios were formed at the end of December and followed from January onwards, producing a continuous January-start series from January 2001 to December 2023. The same annual formation procedure was repeated for each alternative start month from February through December to assess whether the main findings would depend materially on the starting month of the annual investment cycle.

Monthly stock-level price returns were computed as:

$$r_{i,\tau}^{P} = \frac{P_{i,\tau}}{P_{i,\tau-1}} - 1$$

Within each annual cycle, the constituent set was fixed at the formation date. Monthly portfolio price returns were then obtained by applying formation-date portfolio weights to the monthly price returns of the selected stocks throughout the subsequent twelve-month window:

$$r_{p,\tau}^{P} = \sum_{i \in p} w_{i,p,t-1} r_{i,\tau}^{P}$$

for $\tau = t, \ldots, t+11$. Portfolio membership was, therefore determined at the formation date and was not re-screened during the holding year. Portfolios were retained only when a complete twelve-month portfolio return sequence was available for the relevant holding window.

The reported return series were transaction-cost-adjusted total-return approximations. For a given annual cycle, let $G_{p,t}^{P}$ denote the gross twelve-month price-growth factor of portfolio p:

$$G_{p,t}^{P} = \prod_{\tau=t}^{t+11} (1 + r_{p,\tau}^{P})$$

Formation-date portfolio dividend yield was computed as the weighted average of constituent dividend yields,

$$DY_{p,t-1} = \sum_{i \in p} w_{i,p,t-1} \left(\frac{DPS_{i,t-1}}{P_{i,t-1}} \right)$$

Gross total return over the cycle was then approximated by:

$$G_{p,t}^{TR,gross} = G_{p,t}^{P} + DY_{p,t-1}$$

A one-way transaction cost of 0.5% was assumed, implying a 1.0% round-trip cost for each annual cycle. Let c denote the one-way transaction cost. The corresponding net target gross return was:

$$G_{p,t}^{target} = G_{p,t}^{TR,gross}(1 - 2c)$$

To distribute this annual adjustment across the 12 monthly observations, the procedure applied was:

$$\phi_{p,t} = \begin{cases} \left(\dfrac{G_{p,t}^{target}}{G_{p,t}^{P}} \right)^{1/12}, & \text{if } G_{p,t}^{P} > 0 \text{ and } G_{p,t}^{target} > 0, \\ 1, & \text{if } G_{p,t}^{P} \leq 0 \text{ or } G_{p,t}^{target} \leq 0. \end{cases}$$

The monthly transaction-cost-adjusted total return was, therefore:

$$r_{p,\tau}^{TR} = \phi_{p,t}(1 + r_{p,\tau}^{P}) - 1$$

The reported return series should therefore be interpreted as approximations to transaction-cost-adjusted total returns rather than exact dividend-reinvestment returns based on realised payment dates.

The dividend-treatment approximation, which added the formation-date portfolio dividend yield to the compounded price return over the twelve-month buy-and-hold window, followed the convention established by Visscher and Filbeck (2003) and adopted in the subsequent dividend-yield literature. Because this same construction applied symmetrically to all nine portfolios in the comparison set, pairwise comparative metrics, including Sharpe ratios, Treynor indices, and factor-adjusted alphas, remained structurally unbiased.

The alternative of constructing total returns directly from the Datastream Return Index (RI) series was assessed, but was rejected because of data-coverage limitations. Of the 329,240 valid monthly price observations across 1,490 unique firms in the sample, only 214,826 observations across 1,100 firms carried a non-missing RI series. Switching to an RI-based construction would, therefore drop 114,414 observations (34.75% of the clean price sample) and eliminate 390 unique firms (26.17% of the listed universe). This shortfall was consistent with the well-documented data-quality issues affecting Datastream individual-equity series outside the United States (Ince & Porter, 2006). The resulting coverage loss would introduce a far more severe sample-selection bias than the small approximation cost from adding the formation-date dividend yield in place of the RI series. Table 1 reports the full diagnostic.

Table 1

Return Index versus Price-Based Observations (December 2000 – December 2023)

Metric	Value
Clean price observations (P > 0, non-missing)	329,240
Unique firms in clean price sample	1,490
Clean price observations with non-missing RI	214,826
Unique firms with at least one RI observation	1,100
Clean price observations without RI	114,414
Share of observations lost if RI is required	34.75%
Unique firms dropped if RI is required	390
Share of firms dropped if RI is required	26.17%

Performance Evaluation

The January-start series was used as the baseline monthly return series for the main performance analysis. The paper reports evidence for the full sample from 2001 to 2023 and for the later sub-period from 2014 to 2023. In line with the study design, portfolio performance was summarised using annualised average return, compound return, the Sharpe ratio, the Treynor ratio, and Fama-French three-factor alpha.

Let $r_{p,t}^{TR}$ denote the monthly transaction-cost-adjusted total return of portfolio p, and let $r_{f,t}$ denote the monthly Treasury bill rate. The annualised arithmetic average return was defined as follows:

$$AR_p = 12\left(\frac{1}{T}\sum_{t=1}^{T} r_{p,t}^{TR}\right)$$

and the compound return over T months was defined as:

$$CR_p = \prod_{t=1}^{T} (1 + r_{p,t}^{TR}) - 1$$

while the Sharpe ratio was computed as:

$$SR_p = \frac{\sqrt{12}\,\overline{(r_{f,t})}}{\sigma(r_{p,t}^{TR} - r_{f,t})}$$

and the Treynor ratio was defined as:

$$TR_p = \frac{12\,\overline{(r_{f,t})}}{\hat{\beta}_p^{CAPM}},$$

where $\hat{\beta}_p^{CAPM}$ was the portfolio beta estimated from a capital asset pricing model regression using the EMAS excess market return as the systematic risk factor. For the formation-month sensitivity analysis, portfolio returns were also compared with the EMAS index using the mean monthly return differential and its time-series t-statistic over the relevant horizon.

Risk-adjusted performance was evaluated using the Fama-French three-factor model. Dividend-yield strategies loaded mechanically on the value factor, since stocks with high dividend yields tended to have low price-to-book ratios, thus abnormal performance estimated against the CAPM alone would absorb a value-premium component that properly belonged to HML. Similarly, SMB controls were included for residual size variation within the top-30 cross-section. The three-factor specification has been shown to improve on the CAPM in explaining returns, with the size and value factors remaining statistically significant for the majority of assets across both bull and bear market regimes (Hibbert & Lawrence, 2010). Size and book-to-market were priced in the Malaysian cross-section over a sample period that overlapped with this study's (Hanafi et al., 2021). The factor-adjusted regression was specified as:

$$r_{p,t}^{TR} - r_{f,t} = \alpha_p^{FF3} + \beta_p MKT\_RF_t + s_p SMB_t + h_p HML_t + \varepsilon_{p,t}$$

where MKT_RF_t, SMB_t, and HML_t denote the monthly market, size, and value factors. The model was estimated over the full sample from January 2001 to December 2023 and over the later sub-period from January 2014 to December 2023. Alpha was annualised as $12\hat{\alpha}_p^{FF3}$, and inference was based on Newey-West heteroskedasticity- and autocorrelation-consistent standard errors with 12 monthly lags. This specification permitted comparison across unrestricted, non-Shariah, and Shariah portfolios not only in terms of realised returns, but also in terms of abnormal performance after controlling for common market, size, and value exposures.

To assess whether comparative performance differences between portfolios were statistically meaningful, two formal pairwise tests were applied. The first was a long-short spread regression. For each ordered pair (B) of portfolios, the spread return $r_{A,t}^{TR} - r_{B,t}^{TR}$ was regressed on the Fama-French market, size, and value factors with Newey-West HAC standard errors at 12 monthly lags, and a two-sided t-test on the annualised intercept evaluated the null $H_0\colon \alpha_{\text{diff}} = 0$. The second was the Jobson and Korkie (1981) test for Sharpe ratio differences with the Memmel (2003) variance correction. For each pair of portfolios with excess returns having sample means μ_A and μ_B, standard deviations σ_A and σ_B, and covariance σ_{AB}, the test statistic was:

$$z = \frac{\sigma_B\mu_A - \sigma_A\mu_B}{\sqrt{\hat{\theta}}}$$

with

$$\hat{\theta} = \frac{1}{T}\left[2\sigma_A^2\sigma_B^2 - 2\sigma_A\sigma_B\sigma_{AB} + \frac{1}{2}\mu_A^2\sigma_B^2 + \frac{1}{2}\mu_B^2\sigma_A^2 - \frac{\mu_A\mu_B}{\sigma_A\sigma_B}\sigma_{AB}^2\right]$$

Under $H_0: SR_A = SR_B$, the statistic was asymptotically standard normal.

RESULTS AND DISCUSSION

Descriptive Evidence

Table 2 reports the distribution of monthly returns for the benchmark and the nine portfolio strategies over 2001 to 2023. Several patterns are immediately visible. All portfolios recorded mean monthly returns above that of the EMAS index, which earned 0.38% per month. Within the value-weighted group, mean monthly returns ranged from 0.47% to 0.56%. The equal-weighted portfolios performed slightly better, with mean returns between 0.53% and 0.62%. The highest means were observed in the dividend-yield portfolios, where monthly returns ranged from 0.70% to 0.95%.

The non-Shariah dividend-yield portfolio recorded the highest mean monthly return, followed by the Shariah dividend-yield portfolio. Therefore, at the descriptive level, return differences were more pronounced across portfolio rules than across screening groups. This pattern was consistent with the earlier argument that screening could not be assessed separately from the rule used to form the portfolio from the screened universe (Boudt et al., 2019; Raza, 2021).

Table 2

Descriptive Statistics of Monthly Transaction-Cost-Adjusted Portfolio Returns, 2001–2023

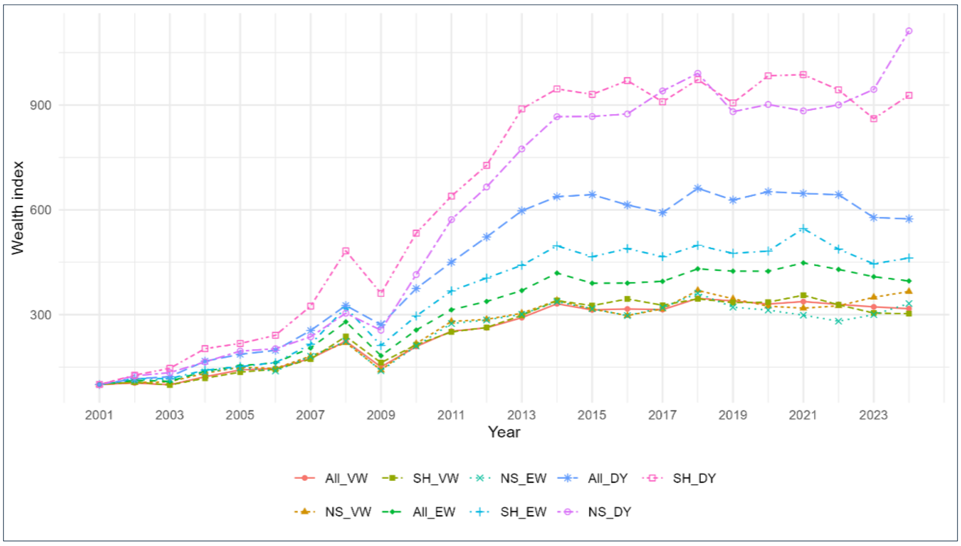
Portfolio	N	Mean	Std. dev.	Min	Max
Market					
EMAS index	276	0.38	4.03	-16.10	14.75
Value-weighted (30 stocks)					
Unrestricted (ALL_{VW})	276	0.49	3.66	-13.19	11.44
Non-Shariah (NS_{VW})	276	0.56	4.09	-16.35	15.56
Shariah (SH_{VW})	276	0.47	3.65	-12.50	11.42
Equal-weighted (30 stocks)					
Unrestricted (ALL_{EW})	276	0.57	3.79	-13.02	11.71
Non-Shariah (NS_{EW})	276	0.53	4.35	-17.59	16.68
Shariah (SH_{EW})	276	0.62	3.64	-14.08	11.03
Dividend-yield (10 stocks)					
Unrestricted (ALL_{DY})	276	0.70	3.59	-13.19	10.33
Non-Shariah (NS_{DY})	276	0.95	3.92	-15.45	22.04
Shariah (SH_{DY})	276	0.88	3.73	-12.60	12.22

Notes. ALL = Unrestricted portfolio; NS = Non-Shariah portfolio; SH = Shariah portfolio

Figure 1 shows the same comparison in cumulative form. All strategies were affected by the 2008–2009 downturn, but the dividend-yield portfolios recovered more quickly and remained above the value-weighted and equal-weighted portfolios over most of the remaining sample. By the end of 2023, the non-Shariah and Shariah dividend-yield portfolios occupied the top two positions in the wealth index. Figure 1 indicates that the stronger performance of the dividend-yield portfolios extended beyond short intervals and was maintained over the longer sample period. This is in line with earlier evidence from the large-cap dividend-yield literature, where the strategy tends to perform best when it is implemented within established blue-chip universes rather than across the market as a whole (Ahmad et al., 2017; Rinne & Vähämaa, 2011; Visscher & Filbeck, 2003).

Figure 1

Cumulative Wealth Indices of Alternative Large-Cap Portfolio Strategies, 2001–2023



Comparative Performance

Table 3 compares annual average return, compound return, the Sharpe ratio, the Treynor index, and Fama-French three-factor alpha for the full sample and the 2014–2023 sub-period. In Panel A, the non-Shariah dividend-yield portfolio recorded the highest annual average return at 11.43%, the highest compound return at 1012.26%, the highest Sharpe ratio at 0.6381, and the highest Treynor index at 0.1114. On realised-return measures, it was the strongest-performing strategy in the sample. A similar result appears within the value-weighted class, where the non-Shariah portfolio recorded the highest annual average return and compound return. Within the equal-weighted class, however, the Shariah portfolio recorded the highest annual average return, compound return, Sharpe ratio, and Treynor index. These within-group comparisons do not support the view that Shariah screening is associated with a general performance trade-off. Instead, they fit more closely with studies that treat the cost of screening as an empirical question rather than as an automatic consequence of constrained investing (Kamil et al., 2021; Trabelsi et al., 2020).

Once common factor exposures are considered, the ranking changes. The highest full-sample Fama-French three-factor alpha was recorded by the Shariah dividend-yield portfolio at 0.0631, followed by the non-Shariah dividend-yield portfolio at 0.0562, and the unrestricted dividend-yield portfolio at 0.0462. The ordering based on raw returns is therefore not the same as the ordering based on factor-adjusted performance. The non-Shariah dividend-yield portfolio led on realised-return measures, whereas the Shariah dividend-yield portfolio led once market, size, and value exposures were controlled for. This distinction is consistent with the earlier discussion that Islamic and non-Islamic equities may differ not only in average returns, but also in the way their returns relate to common pricing factors (Zaremba et al., 2020).

Conditions were notably weaker in the later period, as shown in Panel B. Most value-weighted and equal-weighted portfolios recorded low or negative annual average returns, negative compound returns, and negative Sharpe and Treynor measures over 2014–2023. The non-Shariah dividend-yield portfolio was the only strategy that remained positive across all four realised-performance measures, with an annual average return of 3.15%, a compound return of 28.34%, a Sharpe ratio of 0.0385, and a Treynor index of 0.0063. However, the highest sub-period Fama-French three-factor alpha was recorded by the Shariah dividend-yield portfolio at 0.0384, whereas the corresponding figure for the non-Shariah dividend-yield portfolio was 0.0054. Therefore, the later-period results preserved the same distinction observed in the full sample.

Table 3

Comparative Performance of Alternative Portfolio Strategies over the Full Sample and Recent Sub-Period

	Value-weighted			**Equal-weighted**			**Dividend-yield**		
	ALL	NS	SH	ALL	NS	SH	ALL	NS	SH
Panel A: Full-sample (2001-2023)									
Avg. ret. (%)	5.83	6.66	5.62	6.86	6.37	7.47	8.39	11.43[w]	10.56
Comp. ret. (%)	217.13	266.27	202.74	296.46	231.89	362.15	474.04	1012.26[w]	827.83
Sharpe ratio	0.2419	0.2750	0.2265	0.3124	0.2390	0.3728	0.4533	0.6381[w]	0.6030
Treynor index	0.0353	0.0418	0.0344	0.0458	0.0372	0.0567	0.0756	0.1114[w]	0.1107
FF3 alpha	0.0225	0.0175	0.0240	0.0286	0.0027	0.0352	0.0462	0.0562	0.0631[w]
Panel B: Sub-period (2014-2023)									
Avg. ret. (%)	0.10	1.45	-0.61	0.01	0.60	-0.11	-0.34	3.15[w]	0.69
Comp. ret. (%)	-4.23	7.52	-11.01	-5.38	-1.53	-6.99	-9.99	28.34[w]	-1.94
Sharpe ratio	-0.2502	-0.1035	-0.3149	-0.2533	-0.1725	-0.2533	-0.2563	0.0385[w]	-0.1506
Treynor index	-0.0289	-0.0132	-0.0376	-0.0291	-0.0227	-0.0301	-0.0329	0.0063[w]	-0.0203
FF3 alpha	0.0297	0.0262	0.0234	0.0280	-0.0045	0.0224	0.0328	0.0054	0.0384[w]

Notes. w = the best portfolio by performance measure

Asset-pricing Evidence

Table 4 examines whether the earlier return patterns remained after standard factor adjustment. In Panel A, positive and statistically significant alphas were reported for the unrestricted value-weighted portfolio, the Shariah value-weighted portfolio, the unrestricted equal-weighted portfolio, the Shariah equal-weighted portfolio, and all three dividend-yield portfolios. The largest alphas were concentrated in the dividend-yield class, where the non-Shariah and Shariah portfolios both recorded annualised alphas of about 0.06, with strong statistical significance. The stronger performance of the dividend-yield strategies was, therefore not fully absorbed by the Fama-French factors. This result is close to that reported by Rinne and Vähämaa (2011), who also find that high-yield portfolios remain strong after conventional risk adjustment.

The factor loadings helped to interpret these alphas. In Panel A, the market betas of the value-weighted and equal-weighted portfolios were close to one, whereas the dividend-yield portfolios had lower betas, ranging from 0.75 to 0.83. Their stronger performance could not, therefore be attributed to greater market exposure. The SMB coefficients were mostly negative, which was consistent with the large-cap construction of the portfolios. The HML coefficients varied across strategies, indicating that value exposure differed across both universes and portfolio rules. Even after the admissible universe has been defined, the portfolio rule continued to shape the economic character of the resulting portfolio. That interpretation is consistent with the earlier arguments in Boudt et al. (2019) and Raza (2021).

Table 4

Fama-French Three-Factor Regressions of Portfolio Excess Returns

	Value-weighted			**Equal-weighted**			**Dividend-yield**		
	ALL	NS	SH	ALL	NS	SH	ALL	NS	SH
					Panel A: Full-sample (2001-2023)				
Alpha	0.0225***	0.0175	0.0240***	0.0286***	0.0027	0.0352***	0.0462***	0.0562***	0.0631***
	(0.0001)	(0.1738)	(0.0046)	(0.0000)	(0.8411)	(0.0016)	(0.0006)	(0.0008)	(0.0000)
Beta	0.9691***	0.9739***	0.9461***	0.9849***	0.9690***	0.9153***	0.8254***	0.7526***	0.7484***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
SMB	-0.2151***	-0.1150***	-0.2412***	-0.1741***	0.0013	-0.1711***	-0.1468***	-0.0350	-0.1767***
	(0.0000)	(0.0002)	(0.0000)	(0.0000)	(0.9719)	(0.0000)	(0.0050)	(0.4908)	(0.0000)
HML	-0.1461***	0.0472	-0.1923***	-0.0895***	0.2205***	-0.0776**	-0.0790	0.2441***	0.0182
	(0.0016)	(0.5189)	(0.0000)	(0.0088)	(0.0004)	(0.0227)	(0.1955)	(0.0019)	(0.7122)
R^2	0.9415	0.8591	0.8876	0.9341	0.8645	0.8785	0.7296	0.7079	0.6165
Adj. R^2	0.9408	0.8575	0.8864	0.9333	0.8630	0.8771	0.7266	0.7047	0.6123
F-stat	1458.6362	552.7492	716.1077	1284.1250	578.3082	655.3617	244.6780	219.7751	145.7538
p-value	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Obs.	276	276	276	276	276	276	276	276	276
					Panel B: Sub-period (2014-2023)				
Alpha	0.0297***	0.0262	0.0234*	0.0280***	-0.0045	0.0224	0.0328**	0.0054	0.0384*
	(0.0001)	(0.1868)	(0.0694)	(0.0003)	(0.7769)	(0.2481)	(0.0371)	(0.7363)	(0.0520)
Beta	0.9915***	0.9366***	1.0062***	1.0264***	0.8500***	1.0406***	1.0441***	0.5874***	1.0887***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
SMB	-0.2669***	-0.1527***	-0.2490***	-0.2413***	0.0424	-0.1735***	-0.3272***	0.1119*	-0.2644***
	(0.0000)	(0.0001)	(0.0000)	(0.0000)	(0.4344)	(0.0005)	(0.0000)	(0.0738)	(0.0005)
HML	-0.0805	0.1922*	-0.1695***	-0.0947*	0.3358***	-0.1338***	-0.1202	0.4038***	-0.0725
	(0.2346)	(0.0607)	(0.0002)	(0.0788)	(0.0000)	(0.0007)	(0.2148)	(0.0000)	(0.3418)
R^2	0.9003	0.7692	0.8520	0.9095	0.7882	0.8371	0.7508	0.6148	0.6631
Adj. R^2	0.8977	0.7632	0.8482	0.9072	0.7827	0.8329	0.7443	0.6049	0.6544
F-stat	349.2464	128.8786	222.6352	388.6723	143.8887	198.7059	116.4685	61.7269	76.1003
p-value	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Obs.	120	120	120	120	120	120	120	120	120

Notes. Monthly excess returns of each portfolio are regressed on the Fama–French's market (Beta), size (SMB), and value (HML) factors. Alphas are annualised. p-values in parentheses use Newey-West HAC-robust standard errors with 12 monthly lags. Coefficients are reported with *, **, and *** for 10%, 5%, and 1% significance levels, respectively.

In the later sub-period (Panel B), the set of significant alphas narrowed. Positive and statistically significant alphas remained for the unrestricted value-weighted, Shariah value-weighted, unrestricted equal-weighted, unrestricted dividend-yield, and Shariah dividend-yield portfolios. Notably, the Shariah dividend-yield portfolio continued to record a positive and statistically significant alpha, while the non-Shariah dividend-yield portfolio did not. The point-estimate ranking under factor adjustment was, therefore more favourable to the Shariah dividend-yield portfolio in both the full sample and the sub-period. This does not support the claim that Shariah screening imposes a performance trade-off in Malaysian large-cap portfolio strategies. Whether the cross-portfolio differences are themselves statistically meaningful is formally examined in the following section.

Pairwise Tests of Performance Differences

While the descriptive comparisons and factor regressions demonstrate that the dividend-yield strategy generated the highest mean returns and Fama-French alphas within the panel, these findings do not inherently confirm the statistical significance of performance variations between portfolios. To address this, Table 5 presents two formal pairwise tests, which were applied to the following eight principal portfolio contrasts: the long-short factor-adjusted spread test and the Jobson-Korkie test for Sharpe ratio differences, which incorporates the Memmel variance correction. Results are reported for both the full sample (Panel A) and the sub-period (Panel B).

Table 5

Tests of Differences in Alphas and Sharpe Ratios

	Panel A: Full-sample (2001-2023)		Panel B: Sub-period (2014-2023)	
	α-diff	SR-diff	α-diff	SR-diff
SH_{DY} vs. NS_{DY}	0.0069	-0.0351	0.0330	-0.1891
	(0.7166)	(0.8501)	(0.1675)	(0.5335)
SH_{DY} vs. ALL_{DY}	0.0169	0.1497	0.0055	0.1057
	(0.2110)	(0.2488)	(0.7517)	(0.5285)
NS_{DY} vs. ALL_{DY}	0.0100	0.1848	-0.0274	0.2948
	(0.5220)	(0.2249)	(0.1674)	(0.2935)
SH_{DY} vs. SH_{VW}	0.0390***	0.3765***	0.0150	0.1642
	(0.0097)	(0.0060)	(0.2695)	(0.2756)
SH_{DY} vs. SH_{EW}	0.0279**	0.2301**	0.0160	0.1027
	(0.0329)	(0.0470)	(0.3932)	(0.5171)
NS_{DY} vs. NS_{VW}	0.0386***	0.3630***	-0.0208	0.1420
	(0.0049)	(0.0019)	(0.2797)	(0.5049)
ALL_{DY} vs. ALL_{VW}	0.0237*	0.2114**	0.0031	-0.0061
	(0.0516)	(0.0396)	(0.8367)	(0.9639)
ALL_{DY} vs. ALL_{EW}	0.0176	0.1409	0.0048	-0.0030
	(0.1180)	(0.1329)	(0.7526)	(0.9825)

Notes. For each pair (A, B), the alpha difference (α-diff) is the annualised intercept from a regression of the spread return $r_{A,t}^{TR} - r_{B,t}^{TR}$, on the Fama-French market (MKT_RF), size (SMB), and value (HML) factors, estimated with Newey-West heteroskedasticity- and autocorrelation-consistent (HAC) standard errors at 12 monthly lags. The Sharpe ratio difference (SR-diff) test follows Jobson and Korkie (1981) with the Memmel (2003) variance correction, reported in annualised units. p-values are reported in parentheses below their respective estimates. *, **, and *** denote two-sided significance at the 10%, 5%, and 1% levels, respectively.

Analysis of the full-sample results reveals two patterns. First, cross-universe contrasts indicated no statistically significant difference in performance. Specifically, the performance difference between the Shariah dividend-yield (SH_{DY}) and non-Shariah dividend-yield (NS_{DY}) portfolios did not differ significantly on either measure. Although SH_{DY} exhibited an annualised alpha premium of 0.69 percentage points over NS_{DY}, this gap was not statistically significant ($p = 0.7166$), as was the corresponding difference in Sharpe ratios ($p = 0.8501$). Comparisons against the unrestricted universe (ALL_{DY}) yielded similar outcomes: neither the SH_{DY}-ALL_{DY} contrast (alpha $p = 0.2110$; Sharpe $p = 0.2488$) nor the NS_{DY}-ALL_{DY} contrast (alpha $p = 0.5220$; Sharpe $p = 0.2249$) rejected the null hypothesis of equality. Consequently, the dividend-yield strategy shows no statistically significant difference in risk-adjusted performance across the screening universes.

Second, within each distinct universe, the dividend-yield rule generated a statistically significant performance premium over both value-weighted and equal-weighted alternatives. Within the Shariah universe, the SH_{DY} portfolio outperformed the value-weighted (SH_{VW}) baseline by an alpha of 3.90 percentage points ($p = 0.0097$) and demonstrated a Sharpe ratio improvement significant at the 1% level ($p = 0.0060$). Similarly, SH_{DY} outperformed the equal-weighted (SH_{EW}) baseline with an alpha gap of 2.79 percentage points ($p = 0.0329$) and a Sharpe ratio difference significant at the 5% level ($p = 0.0470$). This intra-universe outperformance was mirrored in the non-Shariah universe (NS_{DY} versus NS_{VW}: alpha gap of 3.86 percentage points, $p = 0.0049$; Sharpe difference $p = 0.0019$) and the unrestricted universe (ALL_{DY} versus ALL_{VW}: alpha gap of 2.37 percentage points, $p = 0.0516$; Sharpe difference $p = 0.0396$). Thus, the dividend rule consistently yielded statistically significant alpha and Sharpe ratio increments within every universe, with the non-significant cross-universe differences.

This contrasting pattern of statistical significance reinforces the earlier interpretations. If Shariah screening imposed an economically meaningful constraint on the dividend-yield strategy, the Shariah portfolio (SH_{DY}) should significantly underperform the non-Shariah portfolio (NS_{DY}). However, no such negative spread was observed. Furthermore, the testing framework's ability to successfully detect significant outperformance *within* each universe rules out low statistical power as the explanation for the absence of a significant cross-universe difference. The absence of a significant difference between the universes is, therefore a genuine finding rather than an artefact of low statistical power. Ultimately, the Shariah dividend-yield portfolio significantly outperformed non-dividend benchmarks within its own universe (at the 5% level or better), but no statistically significant difference was found between the Shariah portfolio and the unrestricted or non-Shariah dividend-yield portfolios.

In the sub-period (Panel B), the point estimates largely retained the directional signs of the full-sample contrasts. However, statistical significance dissipated across all pairs. This loss of significance was primarily attributable to the reduction in sample size from 276 to 120 monthly observations, which substantially widened the standard errors. Furthermore, the post-2014 period coincided with a weaker operating environment on Bursa Malaysia that depressed absolute performance metrics across all categories. Consequently, the sub-period results are best interpreted as a robustness check rather than an independent test of statistical significance. These results confirm that the qualitative performance hierarchy does not reverse during weaker market conditions.

Sensitivity to Portfolio Formation Month

Table 6 shows that the results were not driven by the January formation convention. In every calendar month, the best-performing strategy belonged to the dividend-yield class. In eleven of the twelve formation months, the non-Shariah dividend-yield portfolio recorded the highest average annual return.

The only exception was February, when the Shariah dividend-yield portfolio recorded 10.72%, compared with 9.90% for the non-Shariah dividend-yield portfolio. The main result was, therefore not tied to a particular formation month.

The cross-month comparison points in the same direction. The Shariah dividend-yield portfolio remained close to the non-Shariah dividend-yield portfolio across most formation months and exceeded it once, whereas the value-weighted and equal-weighted portfolios did not display the same consistency. Therefore, Table 6 reinforces the earlier evidence rather than altering it. The main source of performance variation lies in the portfolio rule, particularly dividend-yield selection within large-cap stocks, rather than in the screen considered on its own. This is again consistent with the earlier dividend-yield literature, where the parent universe and the portfolio rule play a central role in the observed outcome (Rinne & Vähämaa, 2011; Visscher & Filbeck, 2003).

Table 6

Average Percentage of Annual Portfolio Returns by Portfolio Formation Month

	Value-weighted			**Equal-weighted**			**Dividend-yield**		
	ALL	NS	SH	ALL	NS	SH	ALL	NS	SH
January	5.83	6.66	5.62	6.86	6.37	7.47	8.39	11.43[w]	10.56
February	5.77	6.39	5.31	6.90	5.37	7.13	8.27	9.90	10.72[w]
March	5.92	6.30	5.55	6.91	5.73	7.00	8.38	10.99[w]	9.90
April	6.18	6.61	5.97	7.31	6.18	7.56	8.81	11.37[w]	8.73
May	6.38	6.71	6.54	7.20	6.24	7.94	8.31	10.75[w]	9.00
June	6.47	7.18	6.41	7.26	7.14	7.70	8.44	10.50[w]	9.74
July	6.33	7.04	6.30	6.76	6.48	7.09	7.83	10.32[w]	9.30
August	6.00	6.84	5.75	6.94	6.20	6.81	7.72	9.78[w]	9.00
September	5.83	7.01	5.53	6.64	6.91	6.49	8.63	10.96[w]	10.71
October	6.17	7.39	5.96	6.96	7.28	7.08	9.56	11.43[w]	10.90
November	6.00	7.31	5.62	7.03	6.70	7.00	9.36	11.40[w]	11.26
December	6.11	6.90	5.95	6.95	6.39	7.53	8.75	11.67[w]	10.09

Notes. w = the best portfolio by formation month

Discussion

Three implications follow from the results of this study. First, the evidence does not indicate that Shariah screening imposes a systematic performance trade-off in Malaysian large-cap portfolio strategies. Shariah portfolios remain competitive under value-weighting, equal-weighting, and dividend-yield construction, and in several comparisons, they perform at least as well as their unrestricted or non-Shariah counterparts. The formal pairwise tests reinforce this interpretation by showing that the cross-universe differences between Shariah, non-Shariah, and unrestricted dividend-yield portfolios are not statistically significant. This is consistent with earlier work showing that the diversification cost often associated with Shariah compliance does not translate mechanically into weaker outcomes (Kamil et al., 2021; Qoyum et al., 2021; Trabelsi et al., 2020).

Second, portfolio construction explains an important share of the variation in returns. Across the cumulative-wealth evidence, the comparative-performance measures, the factor regressions, and the formation-month analysis, the dividend-yield strategy produces the strongest and most persistent results. The pairwise tests further confirm that the dividend-yield rule produces a statistically significant alpha and Sharpe ratio increment over both value-weighted and equal-weighted alternatives within

every universe. That point matters because screening determines which securities may enter the portfolio, but does not determine how they are combined. A substantial share of the observed variation is associated with the rule used to form the portfolio from eligible stocks, rather than with the screen alone. This interpretation is consistent with the arguments in Boudt et al. (2019) and Raza (2021).
Third, the interpretation of relative performance depends on the metric used to evaluate it. The non-Shariah dividend-yield portfolio is strongest on raw-return measures, whereas the Shariah dividend-yield portfolio records the strongest alpha evidence, especially in the later period. The distinction between realised and factor-adjusted performance is, therefore part of the central result rather than a secondary detail. Once common factor exposures are taken into account, the point-estimate relative standing of screened and unscreened portfolios changes. The formal tests show that the cross-universe differences are not statistically significant. The most defensible reading is, therefore that the evidence does not indicate any screening effect on the dividend-yield strategy in factor-adjusted terms.

Overall, the evidence does not support the view that investors necessarily incur a financial shortfall by restricting attention to Shariah-compliant stocks. In Malaysia, a disciplined dividend-yield strategy within the large-cap universe remains competitive in both realised and factor-adjusted terms. More broadly, the results suggest that relative performance depends on the following three elements considered together: the screen that defines the investable universe, the portfolio rule applied within that universe, and the method used to evaluate performance.

CONCLUSION

This study examined whether Shariah screening imposed a performance trade-off in Malaysian large-cap portfolio strategies relative to non-Shariah and unrestricted portfolios. Using monthly data from December 2000 to December 2023, the analysis compared three stock universes, namely unrestricted, non-Shariah, and Shariah stocks. Within each universe, firms were ranked by market capitalisation, the 30 largest stocks were retained, and three portfolios were formed from that set: a value-weighted portfolio, an equal-weighted portfolio, and a 10-stock dividend-yield portfolio composed of the highest-yielding names within the same top-30 group. Performance was evaluated using average return, compound return, the Sharpe ratio, the Treynor ratio, and factor-adjusted performance based on the Fama-French three-factor model. Pairwise differences in factor-adjusted alphas and Sharpe ratios were formally tested using Newey-West HAC-adjusted long-short spread regressions and the Jobson-Korkie statistic with the Memmel variance correction.

The analysis yielded three main findings. First, the evidence did not indicate that Shariah screening imposed a systematic performance trade-off in Malaysian large-cap portfolio strategies. Formal pairwise tests confirmed that the cross-universe differences between Shariah, non-Shariah, and unrestricted dividend-yield portfolios were not statistically significant. Second, portfolio construction explained an important share of the variation in performance, with the dividend-yield strategy producing the strongest overall results. The dividend rule produced a statistically significant alpha and Sharpe ratio increment over both value- and equal-weighted alternatives within every universe. Third, the relative standing of Shariah and non-Shariah portfolios differed between realised-return measures and factor-adjusted measures. Therefore, the effect of screening cannot be understood fully without also considering how portfolios are formed and how performance is assessed.

The present analysis also has implications for theory. One is that the consequences of constrained investing should not be attributed to the screen alone. Screening defines the opportunity set, but the portfolio rule applied within that set remains economically important. Another is that realised performance and abnormal performance should be distinguished when screened portfolios are evaluated. A strategy may rank below others on raw returns, but still compare favourably after adjustment for common factor exposures. Hence, the results suggest that the observed differences associated with Shariah screening also reflect portfolio design and the performance measure used in the evaluation.

The results also have practical implications. For investors and fund managers operating under Shariah constraints, the evidence suggests that compliance need not be viewed as a necessary sacrifice of financial performance within the Malaysian large-cap segment. More specifically, a dividend-yield strategy applied to Shariah-compliant large-cap stocks remains competitive in both raw-return and factor-adjusted terms. The results also indicate that portfolio design deserves close attention in practice. Screening determines which stocks may be held, but the rule used to select and weight those stocks continues to influence the final outcome in economically meaningful ways.

However, several limitations of the present study should be acknowledged. The analysis was confined to a single market, a large-cap universe, and three specific portfolio rules, so the findings might not generalise to smaller firms, other markets, or alternative portfolio-construction methods. In addition, the return series were transaction-cost-adjusted total-return approximations and based on formation-date dividend yield and an assumed round-trip trading cost, rather than exact dividend-reinvestment returns based on realised payment dates. Finally, factor-adjusted performance was evaluated using standard asset-pricing models, which might not have captured every relevant source of risk. These limitations leave room for future work on alternative screening frameworks, additional portfolio rules, and broader market segments.

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