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Research Article

INVESTMENT STRATEGY TRADE-OFFS IN JAKARTA ISLAMIC INDEX STOCKS 2006–2025

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ABSTRACT

Background: Systematic investing rules can discipline entry decisions, but their outcomes depend on market conditions, contribution timing, and liquidity.
Purpose: This study compares dollar-cost averaging (DCA), lumpsum investing (LS), and value averaging (VA) in selected Jakarta Islamic Index (JII) stocks.
Methods: A retrospective backtest uses monthly closing prices for seven purposively selected stocks from January 2006 to January 2025. The strategies are evaluated under a common stated nominal budget using annual returns, volatility, paired tests, and risk-adjusted measures, with IHSG as a broad-market reference.
Findings: VA records the highest mean annual return (16.19%), followed by DCA (15.01%) and LS (14.98%), but the return differences are not statistically significant ($p = 0.254$). DCA has the lowest volatility among the active strategies, while LS achieves the highest cumulative growth among them through earlier market exposure. VA requires flexible contributions and reserve liquidity.
Conclusion: Strategy choice depends on upfront capital availability, tolerance for concentrated entry timing, and the capacity to fund variable contributions.
Originality/value: This long-horizon comparison integrates return, volatility, market exposure, and implementation liquidity in assessing three systematic investment rules for selected Indonesian Sharia equities.

ARTICLE INFO

Keywords:
dollar-cost averaging, Jakarta Islamic Index, lumpsum investing, risk-adjusted return, value averaging

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INTRODUCTION

For retail investors, entering the capital market is only the first decision; a second and often more difficult decision is how to deploy capital through time. Investors must decide when to invest, how much to commit, and whether short-term price movements should alter a pre-existing plan. Behavioral-finance evidence shows that heuristic-driven biases, anchoring, herding, regret, and risk aversion can shape investment judgments (Ahmad, 2024; Mamidala et al. 2024). Indonesia-specific evidence from Sharia stock investors further shows that trading behaviour reflects accounting information, personal financial needs, religiosity, and platform-linked charitable features, while market-logic factors remain influential (Asutay et al. 2023). During volatile markets, emotional responses and personality can predict investor reactions beyond conventional risk-tolerance measures (Brooks & Williams, 2022), while entry conditions can have persistent effects on the disposition effect (Zhang et al. 2022). These findings make systematic investment rules relevant not only as return-generation techniques but also as devices for imposing consistency on capital-deployment decisions. This study focuses on three widely discussed capital-deployment rules. Dollar-cost averaging (DCA) commits a fixed contribution at regular intervals; lumpsum investing (LS) deploys available capital immediately; and value averaging (VA) adjusts contributions so that the portfolio follows a targeted value path. Each rule changes the timing of market exposure, liquidity requirements, and sensitivity to the initial entry point. Prior research shows that DCA outcomes are sensitive to contribution frequency and execution timing (Kirkby et al. 2020; Jin et al. 2023), while direct DCA-LS comparisons show that relative

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performance varies with market conditions and evaluation horizon (Lu et al. 2021). Recent regime-conditioned evidence further shows that high-inflation environments can alter the relative DCA-LS trade-off (Kaur, 2026). Long-horizon evidence from European markets similarly finds that periodic cost averaging can reduce risk relative to buy-and-hold for investors with limited initial capital, although with a return trade-off (Vasileiou & Hadad, 2024).

The timing issue is especially relevant in emerging markets, where market regimes can shift sharply and attempts to chase recent performance can be costly. Evidence from emerging-market mutual funds documents a negative average performance gap associated with investors' market-timing decisions (Cagnazzo, 2022). Investor behavior is also path dependent: entry during weak returns, high volatility, or high policy uncertainty is associated with stronger subsequent disposition bias (Zhang et al. 2022). These findings strengthen the case for evaluating systematic deployment rules over a horizon that includes booms, crises, recoveries, and prolonged weak markets.

This study is situated in the Jakarta Islamic Index (JII), which represents 30 liquid Sharia-compliant stocks in the Indonesian market (Indonesia Stock Exchange, 2025). Prior evidence does not support a blanket assumption that Islamic equities always behave as safe havens. A systematic review finds no consensus on universal safe-haven or diversification benefits (Delle Foglie & Panetta, 2020), while emerging-market evidence reports benefits that vary by regime (Bugan et al. 2022). Cross-country regime analysis also finds that performance differences between Islamic and conventional portfolios are often statistically insignificant (Trabelsi et al. 2020). In Indonesia, portfolio construction and screening choices can materially alter performance (Qoyum et al. 2021), and time-varying optimization evidence further shows that observed Sharia-portfolio performance can vary with portfolio construction and market regime (Ghaemi Asl et al. 2024). JII itself also responds to country risk and macroeconomic variables in both the short and long run (Masrizal et al. 2021).

Crisis-period evidence further shows that Islamic-versus-conventional performance is regime dependent. Some studies document relative Islamic-equity advantages during selected crisis or recovery periods (Al-Yahyaee et al. 2020; Chowdhury et al. 2022). Other evidence is more cautious: Islamic stock indices were affected similarly to conventional markets during COVID-19 in a broad cross-market study (Hasan et al. 2022), whereas hedging benefits in Islamic equities were found mainly during extreme market downfalls and under Sharia screening approaches (Ashraf et al. 2022). This mixed evidence supports a long-horizon design rather than a single-regime comparison.

Prior studies document implementation-timing effects in periodic investing and regime-dependent behavior in Islamic equity markets, but less attention has been given to a three-way DCA-LS-VA comparison that jointly considers return, volatility, time-in-market exposure, and liquidity requirements over a long emerging-market horizon. This study addresses that gap by treating strategy selection as a multidimensional capital-deployment problem rather than a search for a universally superior rule. Its contribution is therefore interpretive as well as empirical: it separates return ranking, volatility control, cumulative exposure, risk-adjusted efficiency, and implementation feasibility within one fixed historical design. The empirical scope is the 2006-2025 horizon and the selected JII-stock sample defined below.

To operationalize this comparison, each strategy is applied to the same monthly price histories under a common stated nominal budget. Annual returns and volatility are followed by paired statistical tests and risk-adjusted comparisons. Exposure timing, liquidity needs, and monitoring requirements are then considered when interpreting the findings. This sequence links the numerical results to the feasibility of each investment rule.

The study has three objectives: to compare annual return and volatility across DCA, LS, VA, and the broad-market IHSG reference; to examine whether paired annual outcomes are statistically distinguishable while summarizing risk-adjusted performance on a common frequency; and to translate the evidence into a decision framework based on entry-timing concentration, time in the market, liquidity flexibility, and implementation burden.

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METHODS

The study uses a retrospective comparative backtest based on secondary market data. Monthly closing prices from January 2006 through January 2025 define a 19-year horizon and 228 monthly return intervals, thereby spanning materially different market environments. Price data were obtained from TradingView and Stockbit; the risk-free input was drawn from Indonesian government-bond yield information provided by PHEI; and IHSG serves as the broad-market reference. The same price series and portfolio construction rules are applied consistently across all three strategies.

The stock sample was selected purposively using four criteria stated in the research design: initial public offering before 2006, regular dividend distribution, consistently positive net profit from 2006, and consistently positive operating cash flow from 2006. Seven companies met these criteria. The ex-post screen intentionally focuses the analysis on financially persistent firms with sufficiently long and consistent histories for the 19-year simulation. The design is therefore retrospective and explanatory rather than a reconstruction of the investable JII constituent universe available at every historical date; inference is confined to this selected stock set. The seven issuers and their sectoral profiles are listed in Table 1.

The analytical scope isolates price appreciation generated by the specified capital-deployment rules. Dividends, transaction fees, taxes, broker costs, alternative starting dates, returns on temporarily undeployed cash, and historical reconstruction of JII membership are not incorporated. IHSG is used as a broad-market contextual reference rather than as a strategy-matched benchmark. These boundaries keep the comparison focused on how DCA, LS, and VA behave when applied to the same selected-stock dataset over one common historical horizon.

Investment Strategy Simulation

To standardize nominal contributions, each strategy was assigned the same stated budget of IDR 228 million for each of the seven stocks. The same nominal budget does not imply the same timing of economic exposure: LS requires the full amount at the start, DCA deploys capital gradually, and VA changes contributions in response to the target value path. This timing difference is a defining feature of the strategies and is retained explicitly in the interpretation rather than treated as a nuisance. Table 2 summarizes the capital-deployment rules and their implications for market exposure.

Table 1. Research sample

Issuer	Ticker	IPO date	Sample role
Unilever Indonesia Tbk.	UNVR	11 January 1982	Consumer goods
Astra International Tbk.	ASII	4 April 1990	Diversified/automotive
Bukit Asam Tbk.	PTBA	23 December 2002	Mining
Kalbe Farma Tbk.	KLBF	30 July 1991	Healthcare
United Tractors Tbk.	UNTR	19 September 1989	Industrial/mining services
Telekomunikasi Indonesia Tbk.	TLKM	14 November 1995	Telecommunications
Indofood Sukses Makmur Tbk.	INDF	14 July 1994	Consumer staples

Table 2. Capital-deployment rules used in the simulation

Strategy	Deployment rule	Budget convention	Economic exposure
DCA	IDR 1 million per stock each month at monthly closing price	228 monthly contributions; total IDR 228 million	Gradual exposure; lower entry-timing concentration
LS	Full IDR 228 million per stock invested at the beginning of the horizon	Entire nominal budget invested immediately	Maximum time in market; concentrated entry timing
VA	Monthly contribution adjusted to follow a target portfolio path of about 10% annual growth	Total nominal budget constrained by the simulation design	Countercyclical contribution rule; requires flexible reserve capital

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Performance Measurement and Statistical Analysis

Returns for periods with external cash flows were measured using the Modified Dietz approach, while simple returns were used where no intermediate contributions were present. Risk was evaluated from return dispersion, including annual within-year volatility and the standard deviation of the 19 annual returns. Risk-adjusted performance was summarized with the Sharpe ratio, Treynor ratio, and Jensen alpha. A standardized annual risk-free reference rate of 7,0532% was derived from Indonesian government-bond yield information (Indonesia Bond Pricing Agency, 2025) and applied consistently within the comparative analysis.

Risk-adjusted metrics are evaluated from the same annual return series, using the common annual reference rate and beta estimated against annual IHSG returns. Keeping return and risk inputs on one annual frequency supports internal comparability across the three strategies. Because the reference rate is standardized across the horizon, these ratios are interpreted as within-study comparative indicators that complement, rather than override, the paired return and volatility evidence.

Because DCA, LS, VA, and IHSG observations are matched by calendar year, the analysis uses the Friedman test for repeated measures. When the volatility omnibus test is significant, paired Wilcoxon tests with Holm correction are used for post-hoc comparisons. Statistical inference is used to distinguish robust differences from descriptive rankings; economic interpretation remains anchored in the mechanics of capital deployment and the study's fixed historical design.

Hypothesis Development

Prior evidence indicates that the relative performance of systematic investment rules depends on contribution frequency, execution timing, market conditions, and evaluation horizon (Kirkby et al. 2020; Jin et al. 2023; Lu et al. 2021). Because this literature does not imply a stable directional ordering, the study uses non-directional comparative hypotheses to assess whether the observed differences extend beyond descriptive ranking.

H1: The annual return distributions of DCA, LS, VA, and IHSG differ across matched calendar years.

H2: The annual within-year volatility distributions of DCA, LS, VA, and IHSG differ across matched calendar years.

The corresponding null hypotheses state that the matched distributions do not differ. The hypotheses are evaluated using the Friedman test, with Holm-adjusted paired Wilcoxon tests used for post-hoc comparisons when the omnibus test is significant.

The framework links the common historical dataset to three alternative capital-deployment rules. The analysis first standardizes the nominal budget, then compares DCA, LS, and VA through return and volatility, followed by paired statistical inference and risk-adjusted performance assessment. The final stage interprets the results as an investor trade-off involving timing, market exposure, and liquidity rather than as a single universal ranking. The analytical sequence is illustrated in Figure 1.

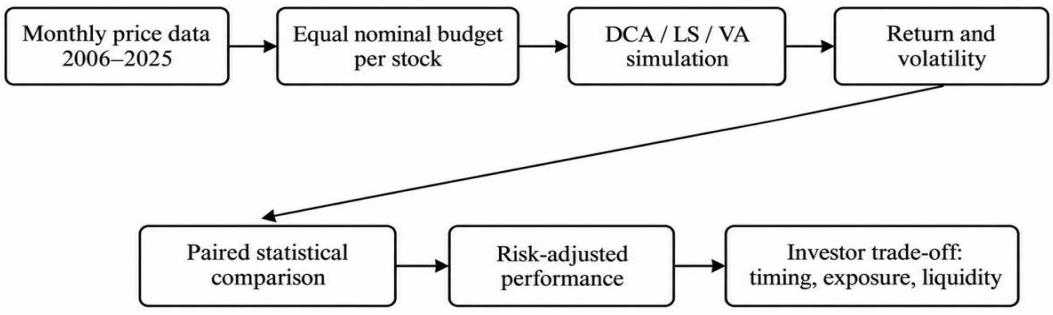


Figure 1. Research framework

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RESULTS

Return Patterns Across Market Regimes

The 19 annual observations show that all strategies experienced large regime-dependent swings. The arithmetic mean annual return was highest for VA at 16.19%, followed by DCA at 15.01% and LS at 14.98%; IHSG averaged 13.23%. These averages, however, conceal substantial year-to-year variation. During the 2008 crisis, VA fell 33.96%, DCA 43.46%, LS 43.97%, and IHSG 49.28%. The following year, VA rebounded 167.40%, LS 144.73%, and DCA 138.18%, compared with 95.91% for IHSG. This crisis-rebound sequence illustrates why a strategy can look attractive on an arithmetic average while still exposing the investor to severe interim losses. Table 3 presents the mean returns and selected annual outcomes underlying these market-regime comparisons.

The pattern is consistent with research cautioning against universal DCA-versus-LS rules. DCA frequency changes the risk-return profile in non-trivial ways (Kirkby et al. 2020), execution date can also matter for periodic investment outcomes (Jin et al. 2023), and direct LS-DCA comparisons show sensitivity to market trend, volatility, horizon, and the performance metric (Lu et al. 2021). In emerging markets, the documented cost of poor discretionary timing further supports interpreting the Indonesian results through exposure timing rather than assuming that one mechanical strategy must dominate (Cagnazzo, 2022).

Mean-Return Ranking and Statistical Significance

The annual-return ranking alone does not establish statistically distinct performance. Using the 19 matched annual observations, the Friedman test produces chi-square = 4.074 with p = 0.254. Therefore, the null hypothesis of no systematic difference in matched annual-return ranks across DCA, LS, VA, and IHSG cannot be rejected at conventional significance levels. The implication is important: VA's higher arithmetic mean is a descriptive advantage in this sample, not evidence that VA reliably outperforms the alternatives. This finding improves the practical interpretation of strategy choice. A headline mean return can be salient even when its statistical advantage is weak. Behavioral-finance studies show that heuristics, risk aversion, and status-quo tendencies can influence retail investment decisions (Ahmad, 2024; Mamidala et al. 2024). Presenting a 'best' strategy from small differences in arithmetic averages would therefore risk turning a descriptive ranking into a stronger conclusion than the evidence supports.

Volatility Differences Across Strategies

Volatility provides a sharper distinction. Mean annual within-year standard deviation was 5.18% for DCA, 5.50% for LS, 5.60% for VA, and 4.43% for IHSG. The same ordering is visible in the standard deviation of the 19 annual returns: DCA 39.61%, LS 42.07%, VA 43.24%, and IHSG 29.36%. DCA therefore reduced variability relative to the other active contribution rules, although the broad-market reference remained less volatile than all three selected-stock strategies.

The paired Friedman test for annual within-year volatility is significant (chi-square = 28.705; $p < 0.001$). Holm-adjusted paired Wilcoxon comparisons show that DCA differs from LS (adjusted p = 0.010), VA (p = 0.001), and IHSG (p = 0.011). LS and VA do not differ significantly from one another (p = 0.732), while both are significantly more volatile than IHSG. Thus, the descriptive observation that DCA smooths entry exposure is supported more strongly in the risk dimension than in the return dimension.

Table 3. Annual-return summary and selected market regimes (%)

Strategy	Mean	2008	2009	2015	2020	2023	2024
DCA	15.01	-43.46	138.18	-16.00	-4.79	-16.87	-9.00
LS	14.98	-43.97	144.73	-17.84	-4.29	-16.61	-4.14
VA	16.19	-33.96	167.40	-20.20	-1.39	-16.16	-1.52
IHSG	13.23	-49.28	95.91	-12.75	-1.31	5.39	-1.37

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The result accords with the mechanism of staged investing. DCA diversifies the purchase date and reduces concentration at one entry point, but it cannot eliminate underlying asset volatility. Kirkby et al. (2020) show formally that DCA risk is sensitive to contribution frequency, and Jin et al. (2023) show that implementation timing can affect realized DCA performance. In the selected JII portfolio, DCA is less variable than LS and VA, yet the diversified market benchmark remains materially less volatile. The volatility statistics and principal post-hoc findings are summarized in Table 4.

Time in Market, Cash-Flow Timing, and Cumulative Growth

The cumulative simulation paths emphasize a different dimension from arithmetic mean returns. Under the fixed-horizon accounting convention, reported end-of-horizon cumulative returns are approximately 473.00% for IHSG, 419.01% for LS, 116.71% for VA, and 45.54% for DCA. Among the three active strategies, LS therefore captures substantially more cumulative market appreciation than DCA because the full nominal budget is exposed from the beginning. The result is best interpreted as evidence about time in the market under the study's capital-availability convention rather than as a universal ranking of the strategies.

Equal nominal contributions do not create equal economic exposure at the beginning of the horizon. LS assumes the full IDR228 million per stock is available at time zero, whereas DCA deploys capital progressively. This distinction is a defining feature of the strategies and part of the economic trade-off being studied. Accordingly, the cumulative paths should be read together with the investor's actual capital-availability pattern: immediate exposure is feasible only when the full investable amount is available, while staged deployment is naturally aligned with capital accumulated through recurring income.

This caveat helps reconcile conflicting evidence. Lu et al. (2021) show that DCA-LS performance depends on horizon, volatility, and market structure, while Jin et al. (2023) demonstrate that periodic-investment outcomes can vary even with the execution date. The conclusion is therefore conditional: when full capital is already available and the long-run price path rises materially, LS benefits from earlier exposure; when investors accumulate capital from recurring income or strongly dislike entry concentration, DCA remains economically relevant.

Value Averaging and Contingent Liquidity Needs

VA generated the highest arithmetic mean annual return and the highest active-strategy volatility. Mechanically, VA increases purchases when the portfolio falls below its target path and reduces purchases when the portfolio is ahead. That countercyclical logic can exploit reversals, but it also creates a contingent need for liquidity when markets weaken. Within the fixed-budget simulation, VA became constrained by available capital around 2015, illustrating a practical characteristic of target-value investing: contribution requirements can rise precisely when prices and investor confidence are under pressure.

VA therefore cannot be evaluated from return statistics alone. The strategy requires reserve capital and acceptance of variable contributions, unlike DCA's predetermined schedule or LS's one-time cash requirement. Liquidity capacity is thus part of VA's implementation profile even though it is not captured by standard deviation, which is why the strategy's observed return advantage should be considered together with funding flexibility.

Table 4. Volatility comparison and paired inference

Strategy	Mean annual volatility (%)	SD of annual returns (%)	Key post-hoc result
DCA	5.18	39.61	Lower than LS and VA
LS	5.50	42.07	Not significantly different from VA
VA	5.60	43.24	Highest active-strategy volatility
IHSG	4.43	29.36	Lower than all three active strategies

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Risk-Adjusted Performance Under a Common Annual Frequency

Risk-adjusted evaluation is sensitive to measurement frequency. To maintain a common analytical basis, the Sharpe and Treynor ratios and Jensen's alpha are calculated using the same annual return series, a common annual reference rate, and beta estimated against annual IHSG returns. CAPM is used to derive the expected return underlying Jensen's alpha. This convention keeps return and risk inputs on one frequency and supports a standardized within-study comparison without changing the underlying price series or capital-deployment rules. Recent Sharia-index research also cautions against relying on the Sharpe ratio alone when interpreting risk-adjusted performance (Raza & Ye, 2025). The resulting annual risk-adjusted performance measures are presented in Table 5.

On this common annual basis, VA has the highest Sharpe ratio (0.211) and Treynor ratio (0.068) and a small positive Jensen alpha (0.84%), while DCA and LS have slightly lower risk-adjusted efficiency and negative alphas. The numerical differences are modest and are not used to justify a universal ranking. Instead, the measures reinforce the central trade-off: the strategy with the strongest cumulative exposure effect (LS) is not the same as the strategy with the highest arithmetic mean or the slightly strongest standardized risk-adjusted annual efficiency (VA). DCA, meanwhile, provides the lowest volatility among the active strategies.

The multidimensional result is consistent with contemporary investment research. DCA's contribution frequency and implementation date alter its risk and performance characteristics (Kirkby et al. 2020; Jin et al. 2023), while DCA-LS comparisons are sensitive to horizon and market structure (Lu et al. 2021). By adding VA to the comparison, the present analysis highlights reserve liquidity and contribution flexibility as implementation dimensions that conventional risk ratios do not capture.

Implications of the Sharia-Equity Setting

The sample comprises selected JII stocks, but the results should not be interpreted as evidence that Sharia screening itself caused performance differences. The literature is mixed: reviews and emerging-market studies report limited or regime-dependent safe-haven benefits (Delle Foglie & Panetta, 2020; Bugan et al. 2022), while a regime-switching portfolio study finds that Islamic-versus-conventional performance differences are often statistically insignificant (Trabelsi et al. 2020). Indonesian evidence also shows that portfolio design and the combination of Islamic and sustainability screens can materially change performance (Qoyum et al. 2021). At the fund level, Islamic equity portfolios exhibit style drift and adjust portfolio exposure following adverse outcomes, underscoring that observed portfolio behaviour also reflects active allocation choices (Chowdhury et al. 2024).

Regime evidence nevertheless explains why the JII setting remains relevant. Some studies report relative Islamic-equity resilience during selected crises (Al-Yahyaee et al. 2020; Chowdhury et al. 2022), but Hasan et al. (2022) find Islamic stock markets were affected similarly to conventional markets during COVID-19. Ashraf et al. (2022) further show that hedging benefits can emerge mainly in extreme downturns and depend on the screening approach. Indonesia-specific evidence confirms that JII remains exposed to country and macroeconomic risk (Masrizal et al. 2021), while broader international evidence shows that political-risk-based allocation can materially affect Sharia-compliant portfolio performance and downside risk (Raza et al. 2023).

Table 5. Annual risk-adjusted performance on a common frequency

Strategy	Mean return (%)	Annual SD (%)	Beta	Sharpe	Treynor	Jensen alpha (%)
DCA	15.01	39.61	1.297	0.201	0.061	-0.06
LS	14.98	42.07	1.366	0.188	0.058	-0.51
VA	16.19	43.24	1.344	0.211	0.068	0.84

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IHSG serves as a broad-market contextual reference. Its lower volatility than the three selected-stock portfolios and its stronger reported cumulative growth reflect, among other factors, broader diversification and different stock composition. For that reason, the comparison is used to place the selected-stock strategies in the context of the Indonesian equity market, not to attribute every observed gap exclusively to DCA, LS, or VA. This interpretive boundary keeps the contribution centered on the mechanics and feasibility of the three deployment rules within the selected sample.

Managerial Implications

For financial advisers, securities firms, wealth managers, and digital investment platforms, systematic strategies should not be communicated as simple personality labels or return rankings. A more decision-useful framework asks whether full capital is already available, how much concentration at a single-entry date is acceptable, whether reserve liquidity can be maintained during drawdowns, and how much monitoring complexity the investor can sustain. Product communication and investor education can therefore connect strategy mechanics directly to cash-flow patterns and liquidity capacity. Table 6 translates these considerations into an investor decision framework across the three strategies.

For investors who contribute from monthly income, DCA has a feasibility advantage because it matches the investor's cash-flow pattern and reduces dependence on a single-entry date. For investors who already possess the full investable amount and can tolerate immediate market exposure, LS maximizes time in the market under the study's convention. For investors with substantial liquidity reserves, stronger monitoring discipline, and willingness to vary contributions, VA provides a systematic countercyclical contribution rule. These conditions are more informative than a simple conservative-moderate-aggressive classification.

The behavioral rationale also matters. Mechanical rules reduce the number of discretionary choices, but they do not remove behavioral risk. Retail-investor research documents heuristic and status-quo effects (Ahmad, 2024; Mamidala et al. 2024), while reactions during market losses are related to emotion and personality (Brooks & Williams, 2022) and entry conditions can shape later disposition behavior (Zhang et al. 2022). Investor education should therefore combine strategy mechanics with liquidity planning and realistic expectations about interim losses.

The findings are intentionally bounded by the research design. The analysis measures price appreciation and does not incorporate dividends, transaction fees, taxes, or broker costs; the results therefore describe price-return performance under the specified purchase rules. The purposive screen concentrates on financially persistent companies with long histories, providing a stable common sample for the 19-year retrospective comparison. Accordingly, inference applies to the selected stock set rather than to a reconstructed historical JII universe.

Table 6. Investor decision framework based on strategy mechanisms

Decision dimension	DCA	Lump Sum	Value Averaging	Practical interpretation
Initial capital requirement	Low and recurring	High at inception	Moderate but variable	Match the rule to actual cash availability
Entry-timing concentration	Low	High	Low to moderate	LS is most exposed to the initial purchase date
Time in market	Gradual	Maximum	Adaptive	Earlier exposure benefits persistent upward markets
Contribution predictability	High	High after initial investment	Low	VA needs reserve liquidity and contribution flexibility
Observed active-strategy volatility	Lowest	Intermediate	Highest	Lower volatility does not automatically imply higher risk-adjusted return
Monitoring burden	Low	Low	High	VA requires regular target-value calculation and funding decisions

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IHSG is used as a broad-market contextual reference rather than a strategy-matched benchmark, so differences relative to IHSG also reflect portfolio composition and diversification. In addition, equal nominal budgets standardize the total stated contribution while intentionally preserving different timing of capital deployment. These scope choices are consistent with the study's central objective: to compare how DCA, LS, and VA trade off entry-timing concentration, time in the market, volatility, and liquidity needs within one fixed historical design.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Within the 2006–2024 annual-return window (using monthly prices through January 2025) and the selected JII-stock sample, DCA, LS, and VA are best understood as alternative capital-deployment mechanisms rather than strategies that can be ranked by one statistic. VA records the highest arithmetic mean annual return, but the paired return distributions are not statistically distinct. DCA records the lowest volatility among the active strategies, while LS produces the strongest reported cumulative growth among them because the full nominal capital enters the market immediately. Under the study's standardized annual risk-adjusted convention, VA has a small advantage in Sharpe and Treynor ratios and a positive Jensen alpha. The central finding is therefore a trade-off: average return, volatility control, time-in-market exposure, and liquidity requirements reward different strategy mechanics.

The findings also clarify how the Sharia-equity setting should be interpreted. The selected JII stocks remain exposed to market, liquidity, and behavioral forces, and the results do not imply that Sharia screening itself causes superior performance. Within the study's scope, the practical value lies in matching the deployment rule to the investor's capital-availability pattern and capacity to remain disciplined through changing market conditions.

Recommendations

Financial-service providers, advisers, and investment platforms should present DCA, LS, and VA in terms of capital availability, entry-timing concentration, liquidity needs, and monitoring demands rather than as universal return rankings. DCA is especially relevant when capital arrives periodically, LS when funds are already available and immediate exposure is acceptable, and VA when investors can maintain flexible reserve liquidity and manage a target-value path. Future studies can extend this fixed-horizon evidence through total-return measures, alternative entry dates or rolling horizons, passive JII benchmarks or historical constituent reconstruction, explicit treatment of undeployed cash, and regime-specific analysis. These extensions complement the present design and can test how broadly the identified trade-offs generalize across investor and market settings.

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