

Navigating Dividend Yield in the Hong Kong Market: The S&P Access Hong Kong Low Volatility High Dividend Index

Contributor

Jason Ye, CFA
Director
Factors and Thematics Indices
jason.ye@spglobal.com

Introduction

Amid the prolonged decline in the Hong Kong equity market spanning from 2020 to 2023, investors faced formidable challenges navigating the landscape of listed stocks in Hong Kong. However, during this turbulence, a strategy that combines high dividends with a low volatility screen emerged as a strong performance generator. S&P Dow Jones Indices (S&P DJI) has been at the forefront of integrating low volatility and high dividend factors since 2012, when we launched the first index of its kind, the [S&P 500[®] Low Volatility High Dividend Index](#). In previous research studies like "[The Beauty of Simplicity: The S&P 500 Low Volatility High Dividend Index](#)" and "[Blending Low Volatility with Dividend Yield in the China A-Share Market](#)," S&P DJI's research team underscored the efficacy of integrating these factors in both the U.S. and China A-Shares markets. Building upon this foundation, our index offering extends to the Hong Kong-listed stock market.

In this paper, we introduce the [S&P Access Hong Kong Low Volatility High Dividend Index](#), a pioneering index that tracks 50 high dividend yield stocks within the [S&P Access Hong Kong Index](#) universe. Through our exploration, we shed light on the historical performance and characteristics of this index.

Register to receive our latest research, education, and commentary at
on.spdji.com/SignUp.

Empirical Study

In a related paper, "[Exploring China A-Share Dividends and High-Yield Strategy Performance](#)," we performed an empirical study of quintile analysis on hypothetical portfolios sorted by dividend yield in the China A-Shares market. We extended the same framework to conduct an analysis of stocks in the Hang Seng Composite Index (HSCI) universe.

We sorted dividend-paying stocks according to their trailing 12-month dividend yield and allocated them to five hypothetical portfolios based on dividend yield, ranging from highest to lowest, with non-dividend-paying companies assigned to a separate sixth portfolio. We rebalance the hypothetical portfolios semi-annually at the end of January and July.

Exhibit 1 illustrates the equal-weighted returns of each hypothetical portfolio. Our analysis indicates that across most of the back-tested time frames, the high dividend yield portfolio consistently outperformed other portfolios. The relationship between yield and historical performance exhibited a monotonic trend over the full period, with historical performance increasing as we moved from the low-yield quintile portfolio to the high-yield quintile portfolio. However, the best-performing portfolio was the second-highest dividend yield quintile over the 3-, 5-, 7- and 10-year observation periods.

The risk, as measured by the annualized standard deviation of monthly returns, was highest for the hypothetical non-dividend-paying portfolio. Among dividend payers, we observe that the highest volatility occurred in either the highest or lowest yield portfolio, depending on the sample period we look at.

Exhibit 1: Historical Equal-Weighted Performance of Hang Seng Index Stocks Sorted into Hypothetical Dividend Portfolios



All portfolios are hypothetical.
 Source: S&P Dow Jones Indices LLC, FactSet. Data from Jan. 30, 2004, to Dec. 31, 2023. Index performance based on total returns in CNY. Past performance is no guarantee of future results. Charts are provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

We further assessed the performance of the hypothetical market-cap-weighted portfolio and observed similar return patterns. . In general, the highest dividend yield portfolio outperformed the rest among the market-cap-weighted portfolios as of Dec. 31, 2023 (see Exhibit 13 in the Appendix). This empirical evidence provides a strong research foundation for us to launch an index to track high dividend stocks in the Hong Kong market.

Index Construction

On Feb. 20, 2017, S&P DJI launched the S&P Access Hong Kong Low Volatility High Dividend Index. This index begins by selecting the top 75 highest dividend yield stocks from the S&P Access Hong Kong Index. The S&P Access Hong Kong Index mirrors the universe of Hong Kong-listed stocks accessible to Chinese mainland investors through the Southbound Trading Segments of the Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect Programs. Subsequently, from this pool of 75 stocks, the index employs an additional screening process to identify the 25 stocks with the highest volatility and remove those stocks. Screening out the 25 most volatile stocks aims to reduce the overall portfolio volatility within the high dividend yield stock universe.

During the period spanning March 1, 2017, to Dec. 31, 2023, the S&P Access Hong Kong Low Volatility High Dividend Index demonstrated remarkable performance, outpacing the Hang Seng Index by 24%. This live track record underscores the index's ability to navigate the Hong Kong market during challenging times. For an overview of the index methodology, please refer to Exhibit 2.

Exhibit 2: S&P Access Hong Kong Low Volatility High Dividend Index Methodology

| Criteria | Details |
|--------------------------------|---|
| Universe | S&P Access Hong Kong Index |
| Liquidity and Cash Flow Screen | <ul style="list-style-type: none"> – Trailing 12-month net operating cash flow ≥ 0 – Three-month average daily value traded (ADVT) \geq HKD 30 million – Each stock must have been issued and trading at least 12 months prior to becoming an index constituent. However, there is no minimum number of days that each stock must have actually traded. |
| Selection Process | <ol style="list-style-type: none"> 1. All stocks in the selection universe are ranked in descending order by trailing 12-month dividend yield. 2. The top 75 stocks with the highest dividend yield are selected, provided that the number of stocks from each GICS® sector is capped at 15. 3. Of the 75 selected stocks, the realized volatility is calculated as the standard deviation of the security's daily price returns over the trailing 12 months. 4. The top 50 securities with the lowest realized volatility are selected among the 75 highest dividend yield stocks. |
| Weighting | Trailing 12-month dividend yield weighted |
| Constituent Capping | 0.05% flooring and 5% capping on single constituent 30% capping on single GICS sector |
| Rebalancing | Semi-annual, effective date the last business day of January and July |
| First Value Date | Jan. 31, 2011 |
| Launch Date | Feb. 20, 2017 |

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2023. Table is provided for illustrative purposes.

Historical Returns

By observing the S&P Access Hong Kong Low Volatility High Dividend Index back-tested history, we can gain valuable insights from the past decade. As shown in Exhibit 3, from Jan. 31, 2011, to Dec. 31, 2023, the index generated a robust outperformance relative to the Hang Seng Index, with an annual excess return of 2.74%.

Across various time horizons, ranging from 1- to 10-year periods, the S&P Access Hong Kong Low Volatility High Dividend Index consistently outperformed the Hang Seng Index, as evidenced in Exhibit 3. Moreover, the index demonstrated lower return volatility compared to the Hang Seng Index over different sample durations. Consequently, the S&P Access Hong Kong Low Volatility High Dividend Index offered a better risk-adjusted return profile relative to the Hang Seng Index historically.

Looking at the price returns since February 2011, the S&P Access Hong Kong Low Volatility High Dividend Index displayed a negative price return of -1.02%, outperforming the Hang Seng Index's -1.90%. Dividends and reinvestments significantly contributed to the index's total return performance, with a return of 5.38% compared to the Hang Seng Index's 3.52%. This underscores the index's total return driven by dividend contributions despite the negative capital appreciation during the period. It further underscores the significance of dividends in Hong Kong's equity market, where price appreciation may remain flat or even negative over an extended period.

Exhibit 3: Historical Performance of the S&P Access Hong Kong Low Volatility High Dividend Index versus Hang Seng Index and S&P Access Hong Kong Index

| Period | Hang Seng Index | S&P Access Hong Kong Index | S&P Access Hong Kong Low Volatility High Dividend Index |
|--|-----------------|----------------------------|---|
| Annualized Compound Return (%) | | | |
| Full Period | 1.62 | 2.25 | 4.37 |
| 1-Year | -8.81 | -7.75 | 5.35 |
| 3-Year | -9.36 | -9.02 | 7.58 |
| 5-Year | -4.24 | -1.01 | 1.29 |
| 10-Year | 1.93 | 2.88 | 5.90 |
| Annualized Standard Deviation (%) | | | |
| Full Period | 18.41 | 19.08 | 18.07 |
| 1-Year | 17.53 | 15.97 | 13.08 |
| 3-Year | 22.80 | 23.59 | 19.03 |
| 5-Year | 20.41 | 20.65 | 17.61 |
| 10-Year | 18.17 | 18.62 | 17.27 |
| Risk-Adjusted Return (%) | | | |
| Full Period | 0.09 | 0.12 | 0.24 |
| 1-Year | -0.50 | -0.48 | 0.41 |
| 3-Year | -0.41 | -0.38 | 0.40 |
| 5-Year | -0.21 | -0.05 | 0.07 |
| 10-Year | 0.11 | 0.15 | 0.34 |
| Annualized Compounded Price Return (%) | | | |
| Full Period | -1.90 | -0.90 | -1.02 |
| Return from Dividends and Reinvestments (%) | | | |
| Full Period | 3.52 | 3.15 | 5.38 |
| Total Return from Dividends and Reinvestments (%) | | | |
| Full-Period | 216.72 | 140.16 | 123.26 |

Source: S&P Dow Jones Indices LLC, FactSet. Data from Jan. 31, 2011, to Dec. 31, 2023. Index performance based on total return in CNY. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. The S&P Access Hong Kong Index was launched Dec. 19, 2016. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Performance across Market Environments

Over the period from February 2011 to December 2023, the S&P Access Hong Kong Low Volatility High Dividend Index demonstrated a compelling track record, consistently outperforming the Hang Seng Index across various market conditions. While the index surpassed the Hang Seng Index only 34.07% of the time in up months, it outperformed 70.31% of the time in down months.

During all months, the S&P Access Hong Kong Low Volatility High Dividend Index posted an average excess return of 0.22%. Conversely, the index exhibited a slight underperformance of -0.33% on average during up months. However, its resilience demonstrated extra value during down months, where it posted an average excess return of 0.54%. This indicates that a significant portion of the index's overall excess returns originated from its outperformance during market downturns (see Exhibit 4).

Exhibit 4: Performance of the S&P Access Hong Kong Low Volatility High Dividend Index versus Hang Seng Index during Up and Down Markets

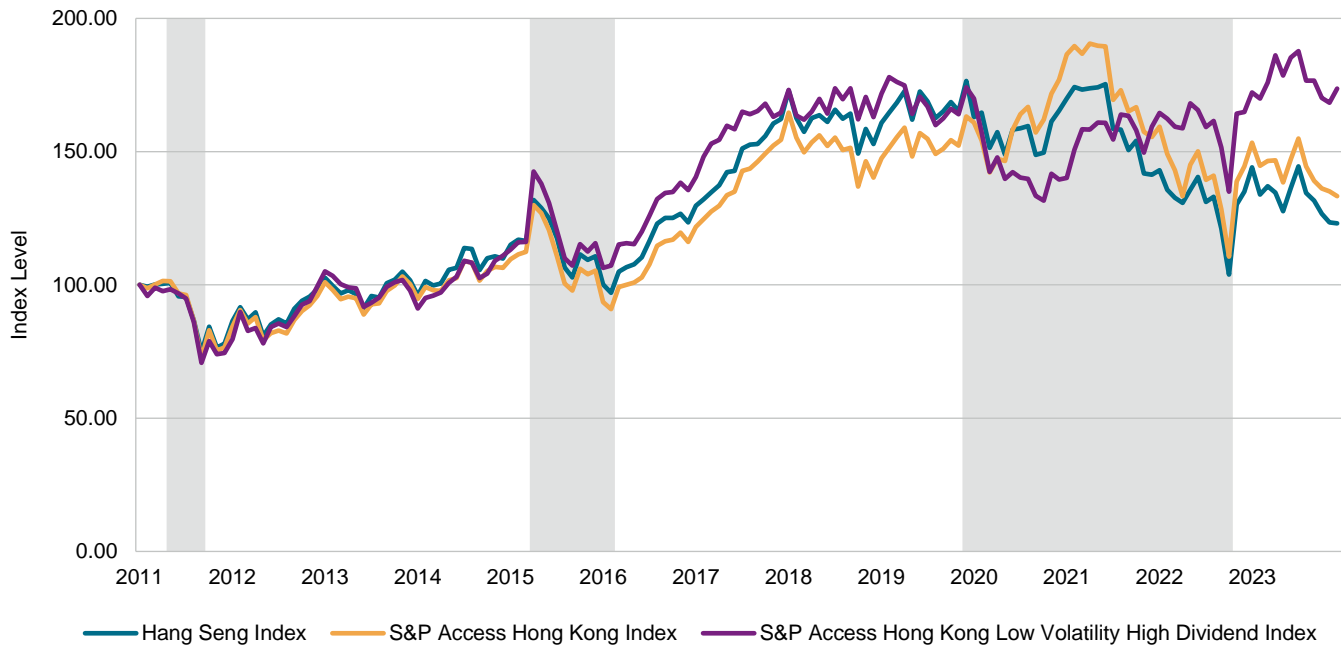
| Period | Hit Rate (%) | Monthly Excess Return (%) |
|-------------|--------------|---------------------------|
| All Months | 49.03 | 0.22 |
| Up Months | 34.07 | -0.33 |
| Down Months | 70.31 | 0.54 |

Source: S&P Dow Jones Indices LLC, FactSet. Data from Jan. 31, 2011, to Dec. 31, 2023. Index performance based on total return in CNY. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 5 provides the growth of the historical index levels for both the Hang Seng Index and the S&P Access Hong Kong Low Volatility High Dividend Index. The shaded gray areas represent the three major drawdown events experienced in the Hong Kong market during this period, which delineate the full history into seven distinct performance subperiods.

Although Exhibit 4 illustrates that, on average, the S&P Access Hong Kong Low Volatility High Dividend Index underperformed during up markets, the actual outcomes varied across different observation periods. For instance, between Sept. 30, 2011, and April 30, 2015, while the Hang Seng Index surged by 76.21%, the S&P Access Hong Kong Low Volatility High Dividend Index outperformed by 25.26%, posting a 101.47% increase. On the other hand, between Feb. 29, 2016, and Dec. 31, 2019, the index lagged the Hang Seng Index by 19.50%, while the Hang Seng Index increased by 81.88%. This example underscores the importance of distinguishing statistical averages from time series outcomes, as the drivers of returns during different market cycles may vary. The simple conclusion that a dividend strategy tends to underperform during the up market might be statistically correct, but that might not necessarily be the case in every market cycle.

Exhibit 5: Historical Index Levels of the S&P Access Hong Kong Low Volatility High Dividend Index versus Hang Seng Index and S&P Access Hong Kong Index



Source: S&P Dow Jones Indices LLC, FactSet. Data from Jan. 31, 2011, to Dec. 31, 2023. Index performance based on total return in CNY. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. The S&P Access Hong Kong Index was launched Dec. 19, 2016. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Next, we explored if extending the investment horizon would be an effective strategy to mitigate the cyclical performance over time. Exhibit 6 illustrates the variation in rolling 3-, 5- and 10-year excess returns of the S&P Access Hong Kong Low Volatility High Dividend Index compared to the Hang Seng Index.

We can see that a longer performance measurement period correlates with a higher probability of outperformance against the underlying benchmark, as shown by historical data. Over the period from February 2011 to December 2023, observations spanning a three-year performance horizon totaled 120 instances. During this timeframe, the S&P Access Hong Kong Low Volatility High Dividend Index beat the Hang Seng Index in 63.3% of cases, yielding an average excess return of 1.74% per year.

Expanding the sample horizon to 10 years revealed even more compelling results. In 80.6% of observed instances over this extended period, the S&P Access Hong Kong Low Volatility High Dividend Index outperformed the Hang Seng Index, with an average excess return of 1.76% per year. These findings underscore the efficacy of adopting longer investment horizons for achieving a more robust performance outcome historically.

Exhibit 6: Rolling Performance Observations of the S&P Access Hong Kong Low Volatility High Dividend Index

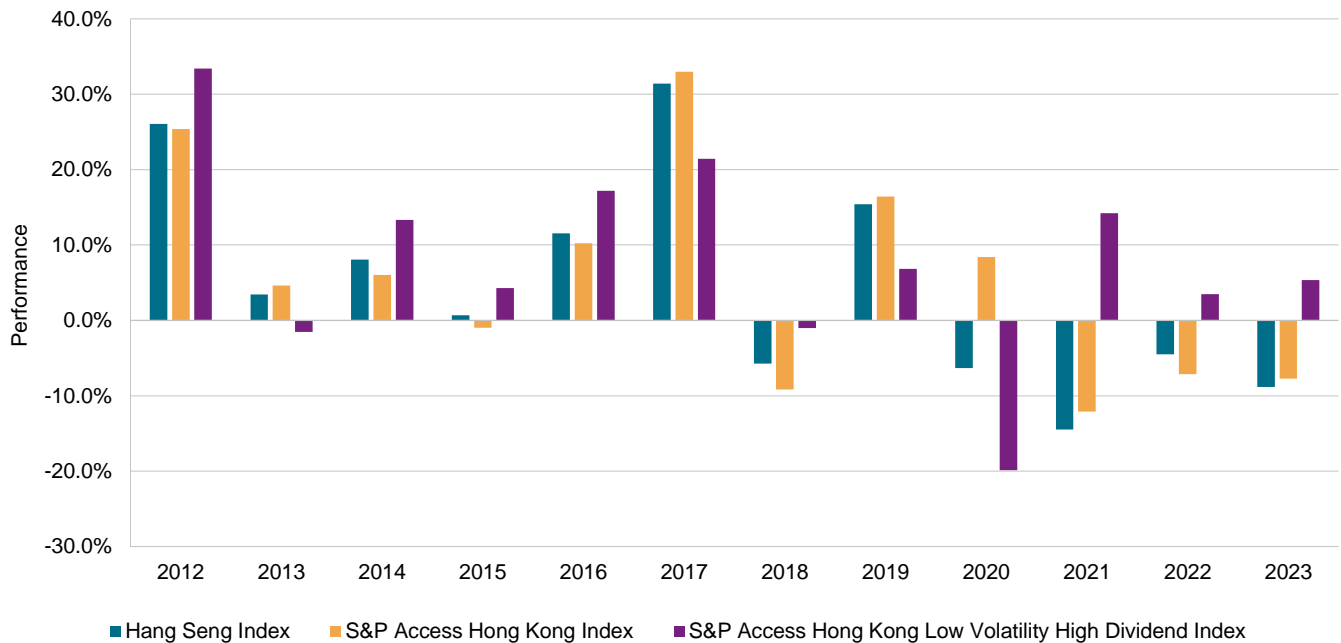
| Period | Number of Observations | Number of Outperformance Observations | Percent of Outperformance Observations | Average Excess Return (%) |
|---------|------------------------|---------------------------------------|--|---------------------------|
| 3-Year | 120 | 76 | 63.3 | 1.74 |
| 5-Year | 96 | 71 | 74.0 | 1.10 |
| 10-Year | 36 | 29 | 80.6 | 1.76 |

Source: S&P Dow Jones Indices LLC, FactSet. Data from Jan. 31, 2011, to Dec. 31, 2023. Index performance based on total return in CNY. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Performance Attribution

Throughout the previous decade, the S&P Access Hong Kong Low Volatility High Dividend Index has demonstrated strong performance overall, despite the downturn experienced in 2017 and 2020. After underperforming the Hang Seng Index by 13.54% in 2020, the index posted a strong rebound post-2020, showcasing resilience amid a challenging market environment within the broader Hong Kong equity market (see Exhibit 7).

Exhibit 7: Calendar Year Performance



Source: S&P Dow Jones Indices LLC, FactSet. Data from Dec. 31, 2011, to Dec. 31, 2023. Index performance based on total return in CNY. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. The S&P Access Hong Kong Index was launched Dec. 19, 2016. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

A closer examination of the outperformance witnessed between 2021 and 2023 reveals informative insights, as shown in Exhibit 8. The index's performance during this period can be attributed, in part, to an overweight position in the Energy sector, which exhibited strong performance throughout the period. However, the primary driver of the outperformance originated not from the sector allocation effect, but rather from stock selection within specific sectors. For instance, the selection effect within the Financials and Information Technology sectors significantly contributed to the observed outperformance. This finding resonates with our observations in other research studies, such as those detailed in the [previously mentioned paper](#), which underscores that the historical outperformance of high dividend yield strategies in the China A-Shares market cannot be solely attributed to sector allocation effects. The performance attribution of the S&P Access Hong Kong Low Volatility High Dividend index showed that in the Hong Kong market, the excess return between 2021 and 2023 was also attributed to a combination of sector allocation and stock selection effect.

Exhibit 8: Three-Factor Brinson Performance Attribution

| Sector | S&P Access Hong Kong Low Volatility High Dividend (%) | | S&P Access Hong Kong (%) | | Attribution Analysis (%) | | | |
|------------------------|---|--------------|--------------------------|--------------|--------------------------|------------------|--------------------|--------------|
| | Average Weight | Total Return | Average Weight | Total Return | Allocation Effect | Selection Effect | Interaction Effect | Total Effect |
| Energy | 11.42 | 198.51 | 2.56 | 154.55 | 10.90 | 0.31 | 1.24 | 12.45 |
| Utilities | 10.80 | 54.14 | 4.09 | -8.78 | 2.59 | 2.41 | 3.53 | 8.53 |
| Industrials | 12.78 | 35.24 | 6.88 | -15.57 | 0.94 | 3.79 | 2.13 | 6.87 |
| Consumer Discretionary | 0.97 | 6.74 | 14.49 | -48.75 | 4.57 | 4.76 | -3.66 | 5.67 |
| Communication Services | 6.60 | 2.63 | 17.04 | -38.08 | 3.31 | 3.11 | -1.72 | 4.71 |
| Financials | 27.05 | 27.24 | 31.11 | 4.68 | -0.58 | 6.02 | -1.12 | 4.33 |
| Information Technology | 2.91 | 55.60 | 4.82 | -41.69 | 0.59 | 5.41 | -2.72 | 3.28 |
| Health Care | 0.87 | 35.45 | 6.28 | -47.66 | 2.24 | 4.18 | -3.42 | 3.00 |
| Consumer Staples | 3.73 | -0.91 | 3.71 | -43.83 | 0.20 | 2.34 | -0.25 | 2.29 |
| Real Estate | 15.33 | -25.69 | 6.87 | -37.47 | -1.50 | 1.17 | 1.27 | 0.93 |
| Materials | 7.54 | -50.12 | 2.16 | -14.65 | 0.54 | -1.03 | -3.32 | -3.81 |
| Total | 100.00 | 23.99 | 100.00 | -24.26 | 23.80 | 32.49 | -8.04 | 48.25 |

Source: S&P Dow Jones Indices LLC, FactSet. Data from Jan. 1, 2021, to Dec. 31, 2023. Index performance based on total return in CNY. Past performance is no guarantee of future results. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. The S&P Access Hong Kong Index was launched Dec. 19, 2016. All data prior to index launch date is back-tested hypothetical data. Table is provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

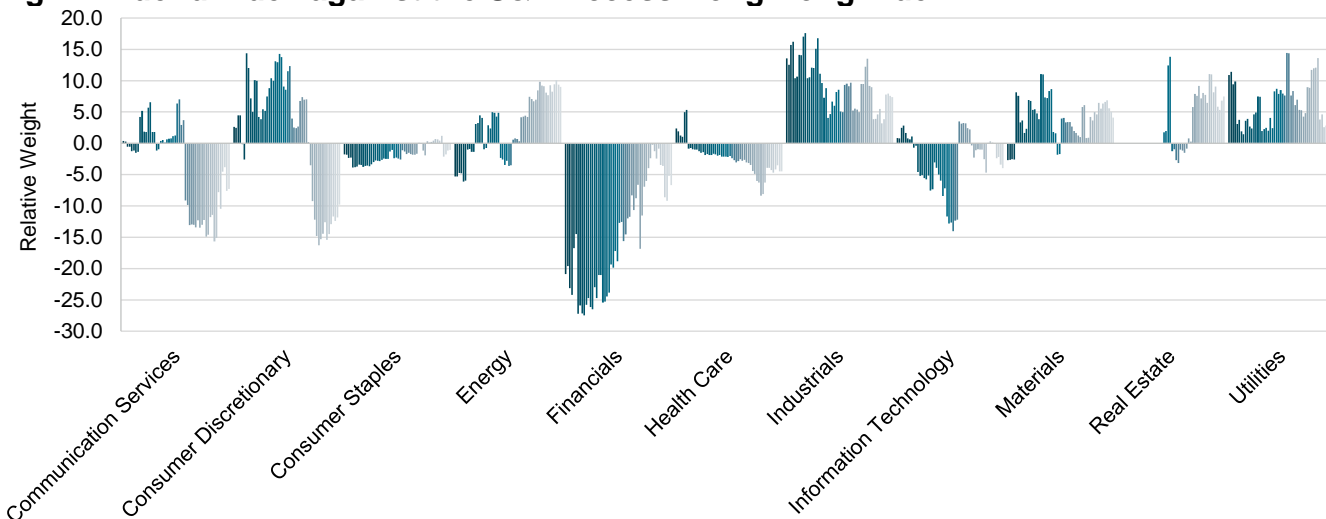
Sector Relative Weights

Exhibit 9 provides a detailed analysis of historical sector weights, highlighting the relative overweight and underweight positions of the GICS sectors within the S&P Access Hong Kong Low Volatility High Dividend Index compared to the S&P Access Hong Kong Index. Within each GICS sector section, the exhibit presents a time series of the relative weight of the sector in the S&P Access Hong Kong Low Volatility High Dividend Index against the S&P Access Hong Kong Index.

The historical data shows a consistent overweight allocation in sectors such as Industrials, Materials, Real Estate and Utilities, while sectors like Financials, Information Technology, Health Care and Consumer Staples exhibited underweight positions. Fluctuations in relative weights are observed in Communication Services, Consumer Discretionary and Energy sectors.

As of Dec. 31, 2023, Energy, Industrials and Real Estate were the three most overweighted sectors within the index. For a comprehensive historical GICS sector allocation, please see Exhibit 14 in the Appendix.

Exhibit 9: Relative GICS Sector Weights of the S&P Access Hong Kong Low Volatility High Dividend Index against the S&P Access Hong Kong Index



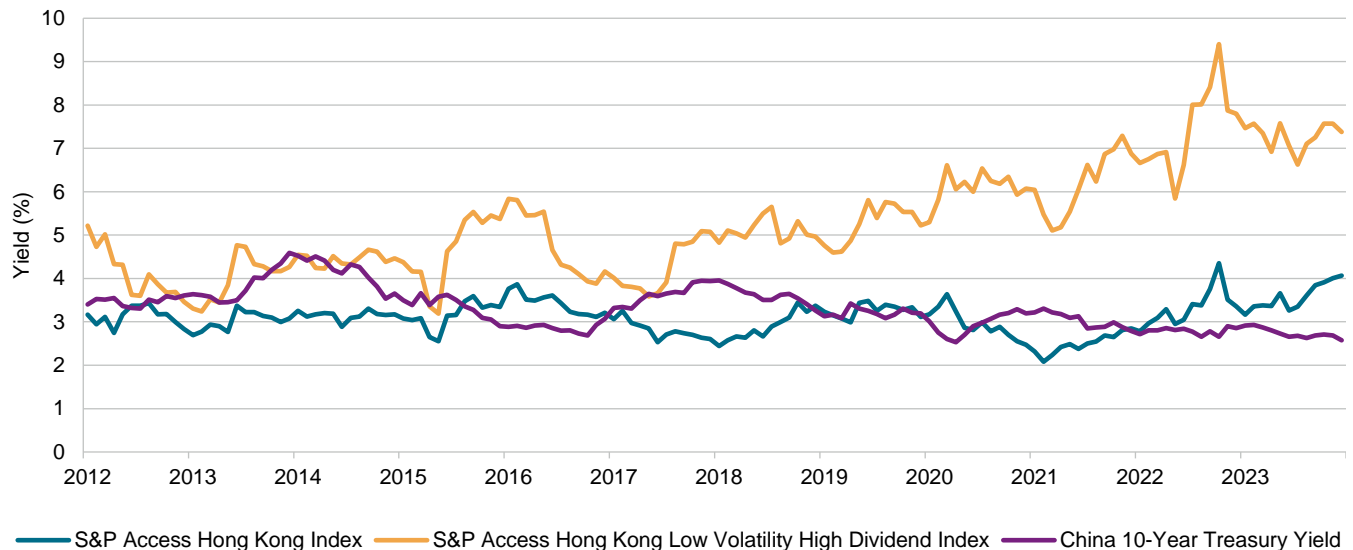
Source: S&P Dow Jones Indices LLC, Data from March 30, 2011, to Dec. 31, 2023. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. The S&P Access Hong Kong Index was launched Dec. 19, 2016. All data prior to index launch date is back-tested hypothetical data. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Dividend Yield and Valuations

The S&P Access Hong Kong Low Volatility High Dividend Index, a dividend-focused index, consistently generated higher dividend yields compared to both the S&P Access Hong Kong Index and the China 10-year treasury yield. As shown in Exhibit 10, the trailing 12-month dividend yield for the S&P Access Hong Kong Low Volatility High Dividend Index has shown a strong upward trend since 2017.

In contrast, the 10-year treasury yield followed a downward trajectory over the same period, while the broad market yield has remained relatively stagnant at around 3% to 4%. This trend underscores the appeal of the dividend yield index as an alternative income solution, particularly amid declining interest rates, where yield-seeking investors may encounter challenges in sourcing sufficient income from the bond market.

Exhibit 10: Index Yields



Source: S&P Dow Jones Indices LLC, FactSet. Data from Jan. 31, 2012, to Dec. 31, 2023. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. The S&P Access Hong Kong Index was launched Dec. 19, 2016. All data prior to index launch date is back-tested hypothetical data. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 11 highlights the major performance characteristics of the S&P Access Hong Kong Low Volatility High Dividend Index. The index tilted toward lower market capitalization, which showed a small-cap bias. Additionally, it reflects substantially lower valuations in comparison to the S&P Access Hong Kong Index.

Exhibit 11: Historical Index Characteristics

| Category | S&P Access Hong Kong Low Volatility High Dividend Index | S&P Access Hong Kong Index |
|----------------------------|---|----------------------------|
| As of Dec. 31, 2023 | | |
| Market Cap (CNY Millions) | 277,456.06 | 679,934.92 |
| Dividend Yield (%) | 7.81 | 4.10 |
| Price/Earnings | 5.31 | 8.40 |
| Price/Cash Flow | 2.13 | 3.98 |
| Price/Book | 0.45 | 1.15 |
| Price/Sales | 0.37 | 0.89 |
| Quarterly Average | | |
| Market Cap (CNY Millions) | 210,096.67 | 704,944.45 |
| Dividend Yield (%) | 6.12 | 3.19 |
| Price/Earnings | 8.09 | 10.91 |
| Price/Cash Flow | 4.85 | 6.78 |
| Price/Book | 0.87 | 1.38 |
| Price/Sales | 0.80 | 1.32 |

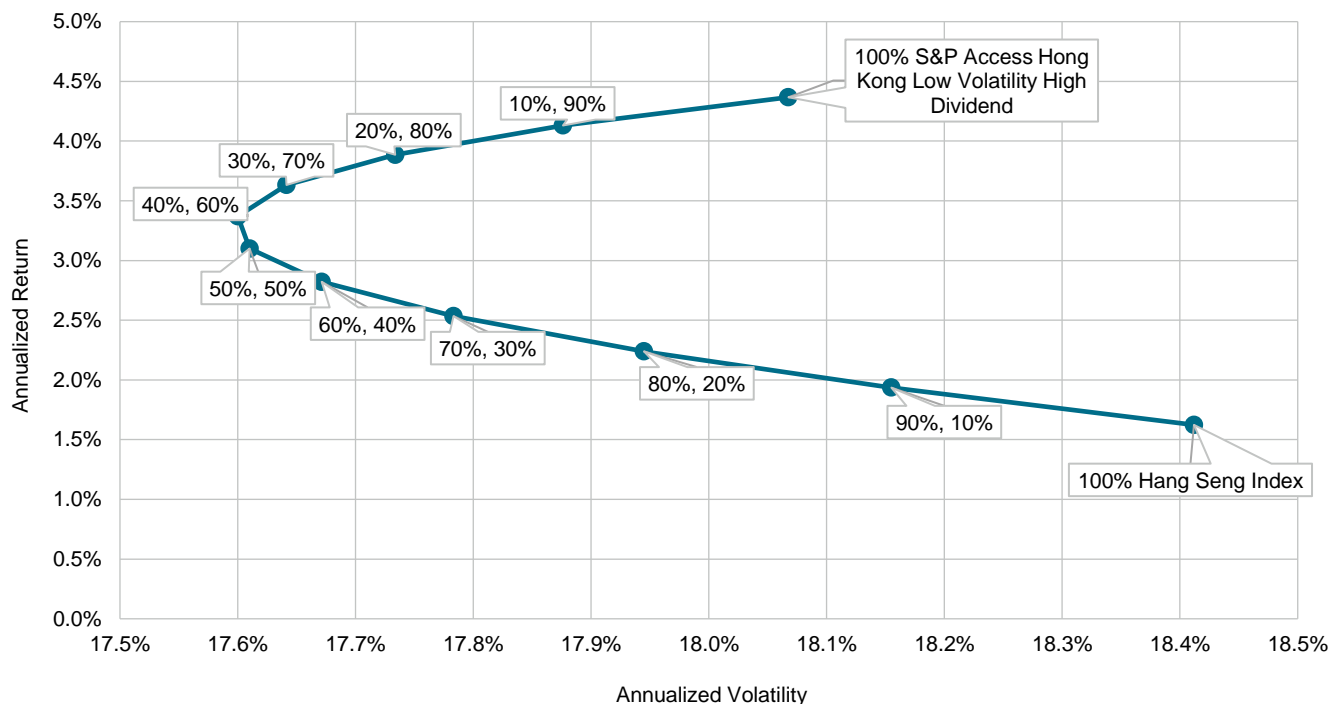
Source: S&P Dow Jones Indices LLC, FactSet. Data from March 31, 2011, to Dec. 31, 2023. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. The S&P Access Hong Kong Index was launched Dec. 19, 2016. All data prior to index launch date is back-tested hypothetical data. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Index Combination with the Hang Seng Index

Incorporating a dividend strategy into a broad market portfolio could present several potential benefits. To illustrate, we examine the hypothetical outcomes of combining the S&P Access Hong Kong Low Volatility High Dividend Index with the Hang Seng Index. Over the period from February 2011 to December 2023, a hypothetical 100% Hang Seng Index portfolio generated an annual total return of 1.62%, with an annualized volatility of 18.41%.

Exhibit 12 presents the enhancement in risk-adjusted returns resulting from the introduction of allocations to the S&P Access Hong Kong Low Volatility High Dividend Index in increments of 10% to the Hang Seng Index. Historical performance data indicates that a 40/60 allocation improved the total return by 175 bps per year while simultaneously reducing volatility by 81 bps. With further increments in allocation to the S&P Access Hong Kong Low Volatility High Dividend Index, the risk-adjusted return increased accordingly. Ultimately, the portfolio with a 100% allocation to the S&P Access Hong Kong Low Volatility High Dividend Index demonstrates the highest level of risk-adjusted return historically.

Exhibit 12: Index Combination Risk/Return Profile



All portfolios are hypothetical portfolios.
 Source: S&P Dow Jones Indices LLC. Data from Jan. 31, 2011, to Dec. 31, 2023. Index performance is based on total return in CNY. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Conclusion

In this paper, we explored a low volatility high dividend index in the Hong Kong equity market. We started with a research framework that unveiled the outperformance of a high dividend strategy in the Hang Seng Composite Index universe. We then illustrated an indexing approach to focus on this performance by introducing the S&P Access Hong Kong Low Volatility High Dividend Index and showed the index’s strong performance against the Hang Seng Index across various back-tested time horizons. We further investigated the index’s performance attribution, sector allocation and fundamental characteristics, providing a comprehensive review for those who may seek to leverage an index approach to pursue dividend opportunities in Hong Kong equity market.

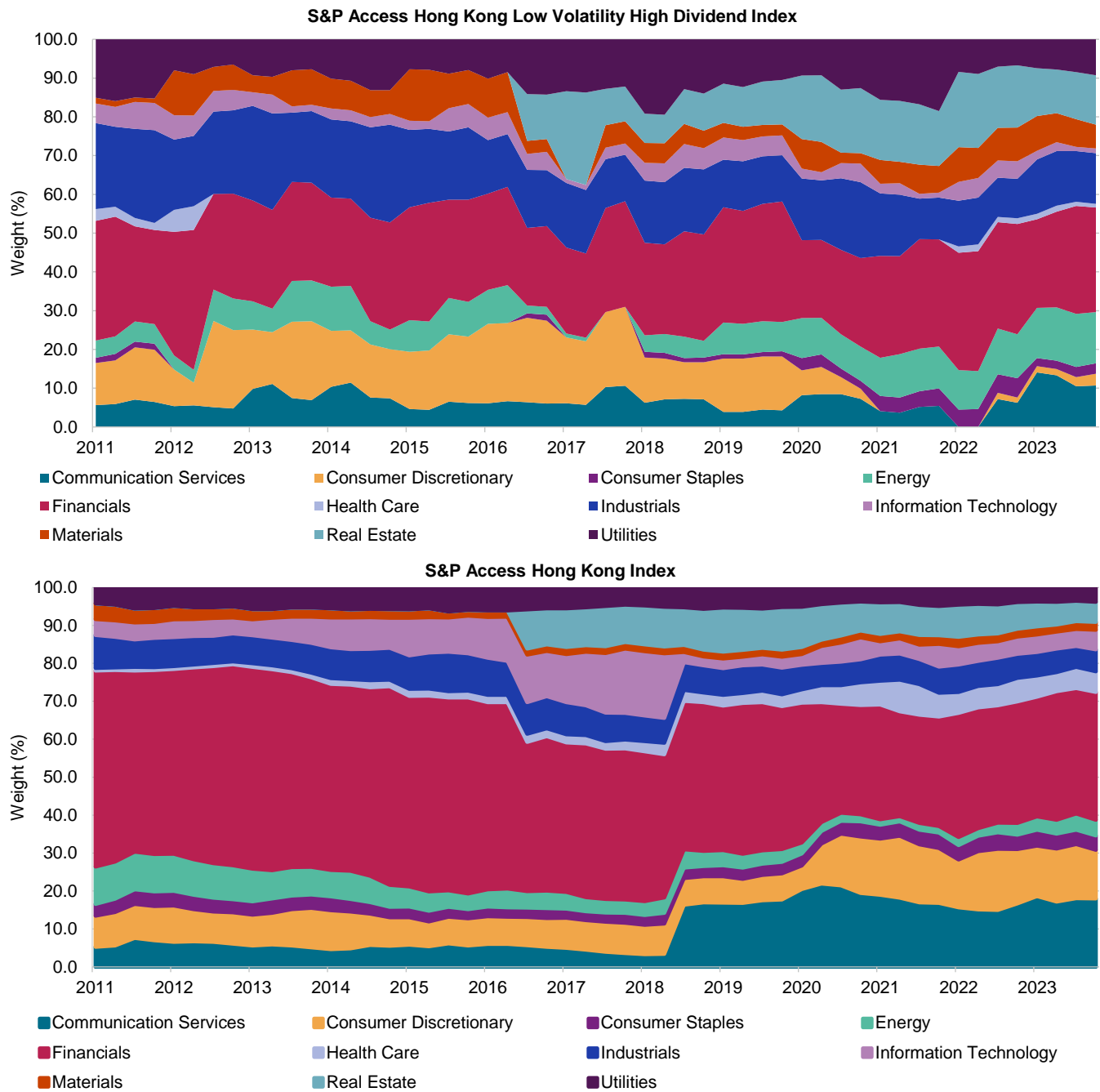
Appendix

Exhibit 13: Historical Market-Cap-Weighted Performance of HSCI Stocks Sorted into Hypothetical Dividend Portfolios



All portfolios are hypothetical.
 Source: S&P Dow Jones Indices LLC, FactSet. Data from Jan. 31, 2004, to Dec. 31, 2023. Index performance based on total returns in CNY. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Charts are provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 14: GICS Sector Weights



Source: S&P Dow Jones Indices LLC. Data from March 31, 2011, to Dec. 31, 2023. Chart is provided for illustrative purposes.

Performance Disclosure/Back-Tested Data

The S&P Access Hong Kong Index was launched Dec. 19, 2016. The S&P Access Hong Kong Low Volatility High Dividend Index was launched Feb. 20, 2017. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. Complete index methodology details are available at www.spglobal.com/spdji. Past performance of the Index is not an indication of future results. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results. Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations. Back-tested performance is for use with institutions only; not for use with retail investors.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate S&P DJI's ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using "Backward Data Assumption" (or pulling back) of ESG data for the calculation of back-tested historical performance. "Backward Data Assumption" is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as "product involvement") were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on "Backward Data Assumption" please refer to the [FAQ](#). The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used.

Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices maintains the index and calculates the index levels and performance shown or discussed but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

General Disclaimer

© 2024 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US 500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, DIVIDEND MONARCHS, BUYBACK ARISTOCRATS, SELECT SECTOR, S&P MAESTRO, S&P PRISM, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, MBX, MCDX, PRIMEX, HHPI and SOVX are trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, S&P Global, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. Index performance does not reflect trading costs, management fees or expenses. S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P Dow Jones Indices is not an investment adviser, commodity trading advisor, commodity pool operator, broker dealer, fiduciary, promoter" (as defined in the Investment Company Act of 1940, as amended), "expert" as enumerated within 15 U.S.C. § 77k(a) or tax advisor. Inclusion of a security, commodity, crypto currency or other asset within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, commodity, crypto currency or other asset, nor is it considered to be investment advice or commodity trading advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Global keeps certain activities of its various divisions and business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.

The Global Industry Classification Standard (GICS®) was developed by and is the exclusive property and a trademark of S&P and MSCI. Neither MSCI, S&P nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.