

A Case for Dividend Growth Strategies

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Dividend strategies have gained a foothold with market participants seeking potential outperformance and attractive yields, especially in the low-rate environment since the 2008 Global Financial Crisis and the even lower-rate environment we have seen since 2020, as the world deals with the economic fallout from COVID-19. Entering 2022 with continuing global economic uncertainties, geopolitical disputes, high inflation and rising rates, a dividend growth strategy focusing on dividend sustainability and financial quality remains attractive.

With the volatile economic situation that has emerged since 2020, and market uncertainties putting pressure on corporate earnings, high-yielding companies without strong financial strength and discipline may not be able to sustain future payout and could be prone to dividend cuts and suspensions.

Stocks with a history of dividend growth, on the other hand, could present a compelling investment opportunity in an uncertain environment. An allocation to companies that have sustainable and growing dividends may provide exposure to high-quality stocks and greater income over time, therefore buffering against market volatility and addressing the risk of rising rates to some extent.

This argument goes beyond the traditional realm of domestic large-cap stocks. It also works for small- and mid-cap stocks and can be applied to international markets as well.

The [S&P High Yield Dividend Aristocrats®](#) is designed to track a basket of stocks from the S&P Composite 1500® that have consistently increased their dividends every year for at least 20 years. This paper investigates the benefits of a dividend growth strategy by analyzing the characteristics of the S&P High Yield Dividend Aristocrats and comparing it to the [S&P 500® High Dividend Index](#)—a high-dividend strategy built on the S&P 500

(see the Appendix for an overview of the index's methodology). In addition, this paper illustrates a few indices that focus on the strongest dividend growers in global and international markets, including Canada, the eurozone, the U.K., Pan Asia and Japan.

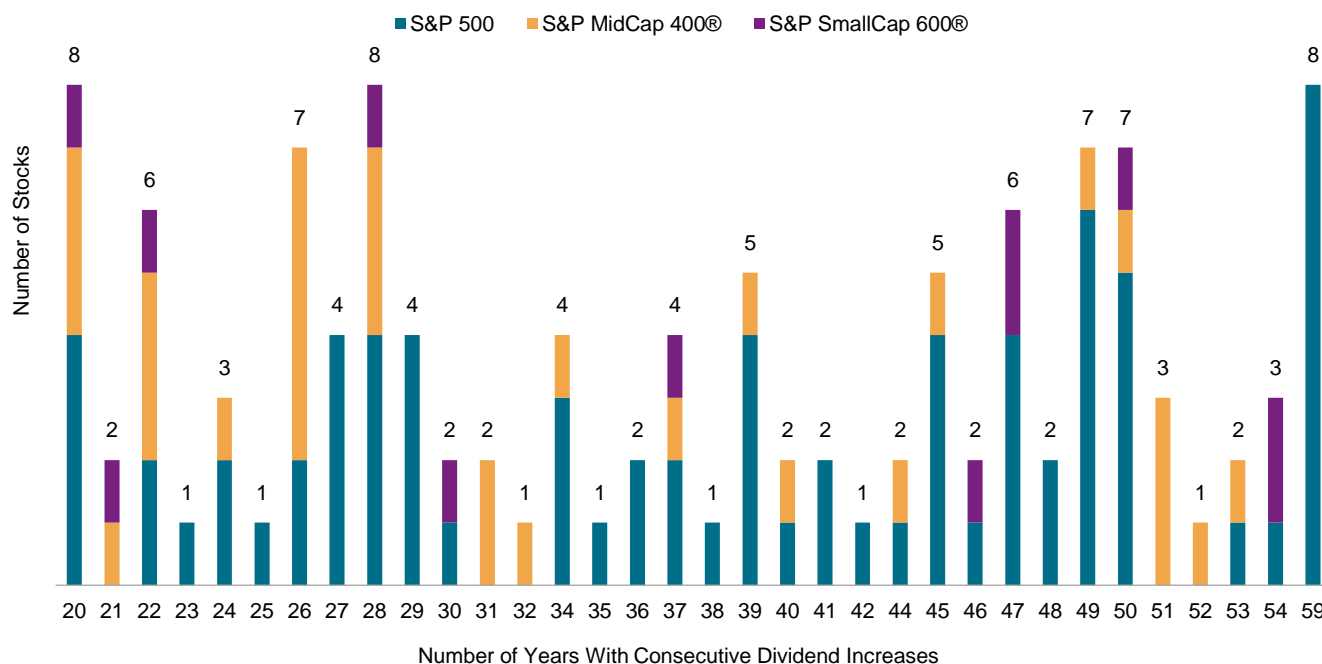
Why Dividend Growers?

Quality

Dividend growth stocks tend to be of higher quality than those of the broader market in terms of earnings quality and leverage. Quite simply, when a company is reliably able to boost its dividend for years or even decades, this may suggest it has a certain amount of financial strength and discipline.

Looking at the S&P High Yield Dividend Aristocrats, while the hurdle for index inclusion is 20 straight years of increasing dividends, the index average is 37 years. Additionally, there are eight constituents with 59 consecutive years of dividend increases (see Exhibit 1).

Exhibit 1: A Long History of Dividend Increases

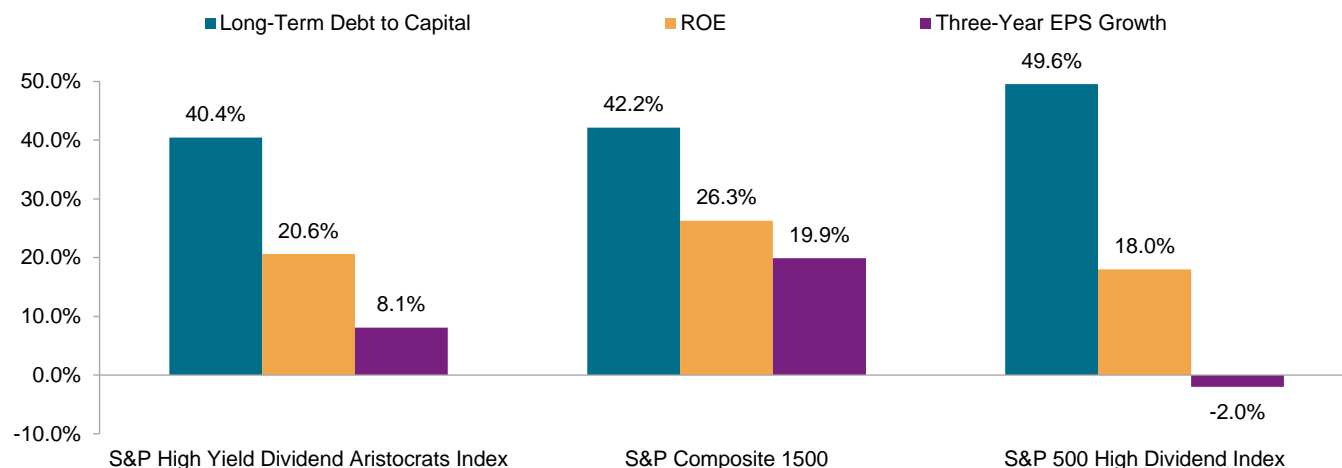


Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Chart is provided for illustrative purposes.

On the other hand, high dividend yield does not necessarily signal financial strength or discipline, as there are cases when new or in-trouble companies attempt to attract market participants by going into debt just to pay shareholders.

For example, the S&P High Yield Dividend Aristocrats had a long-term debt-to-equity ratio of 40.4%, versus 42.2% for the S&P Composite 1500 and 49.6% for the S&P 500 High Dividend Index as of March 31, 2022 (see Exhibit 2). There was also a clear difference between the S&P High Yield Dividend Aristocrats and S&P 500 High Dividend Index in terms of trailing three-year earnings growth and return on equity (ROE).

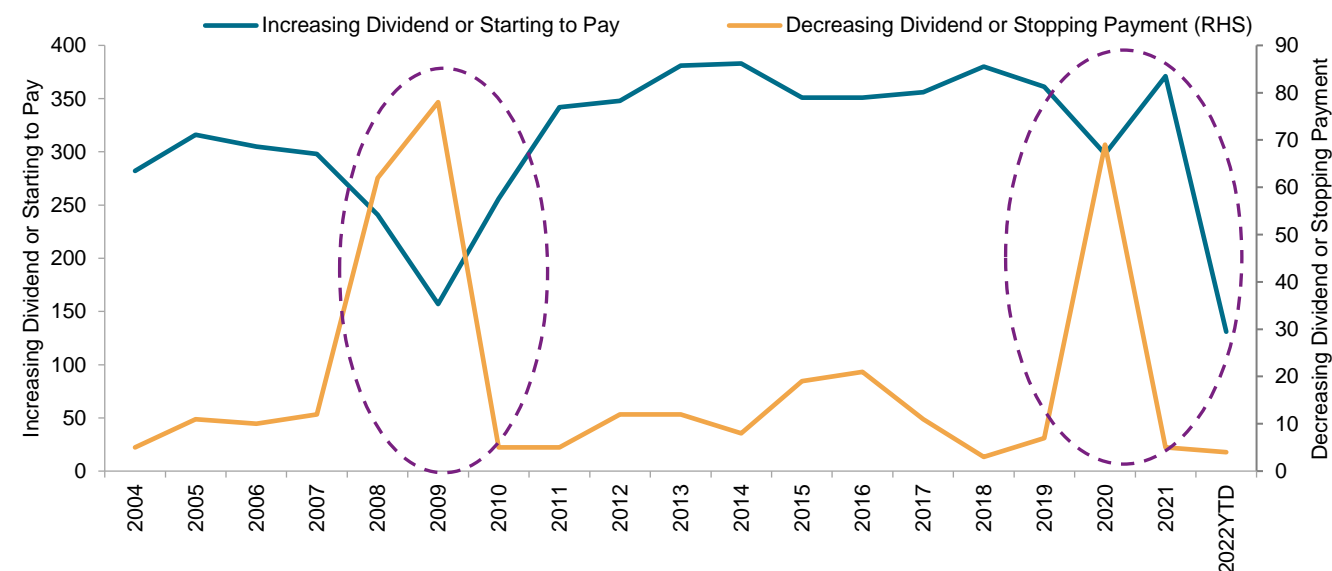
Exhibit 2: Dividend Growers versus High Dividend Payers – Quality



Source: S&P Dow Jones Indices LLC, FactSet. Data as of March 31, 2022. Chart is provided for illustrative purposes.

As a result, high dividend payers with more financial leverage, lower profitability and lower earnings growth may be more likely to cut their dividends in a volatile, low-growth market. In 2020, dividend cuts piled up in the global economic recession brought on by COVID-19 (see Exhibit 3). Historically, a similar trend was observed during the 2008 Global Financial Crisis.

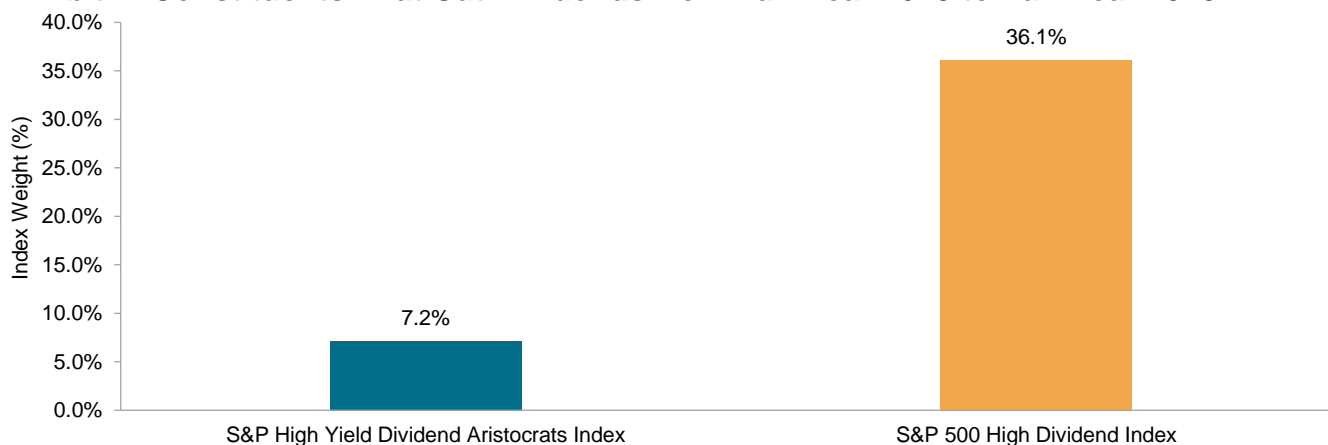
Exhibit 3: Amount of Dividend Actions of S&P 500 Companies



Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Chart is provided for illustrative purposes.

For example, 29 constituents of the S&P 500 High Dividend Index, representing 36.1% of the index weight as of Jan. 31, 2020, cut full-year dividends from full-year 2019 to full-year 2020, while only 7.2% of S&P High Yield Dividend Aristocrats Index constituents did so over the same period (see Exhibit 4). These dividend cuts lower the income potential of a high-dividend strategy. This is a meaningful difference for market participants to consider.

Exhibit 4: Constituents That Cut Dividends from Full-Year 2019 to Full-Year 2020



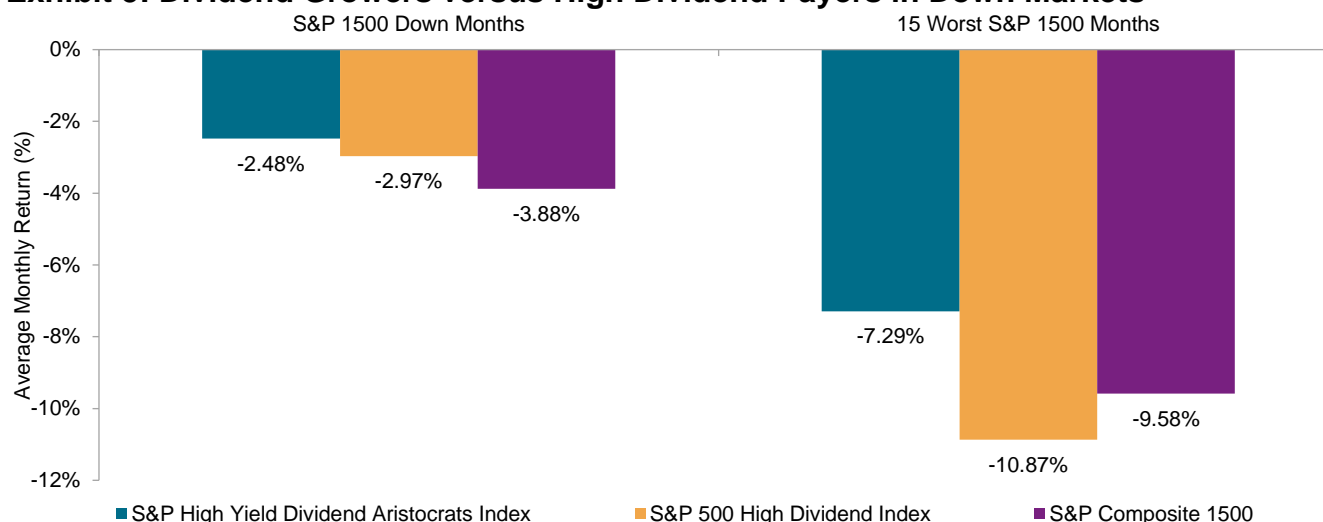
Source: S&P Dow Jones Indices LLC, FactSet. Data as of March 31, 2022. Analysis is based on index constituents of the S&P High Yield Dividend Aristocrats Index and the S&P 500 High Dividend Index as of Jan. 31, 2020. Dividend data is based on actual dividend paid by each constituent company in full-year 2019 and full-year 2020. Chart is provided for illustrative purposes.

Buffer against Market Volatility

Dividend growth stocks could be attractive to market participants looking for disciplined companies that can endure difficult market and economic environments relatively well.

In particular, dividend growers may provide some downside protection during bearish markets. Looking at the period from Dec. 31, 1999, to March 31, 2022, when the market (as represented by the S&P 1500®) was down, the S&P High Yield Dividend Aristocrats outperformed the S&P Composite 1500 and S&P 500 High Dividend Index by an average of 140 bps per month and 49 bps per month, respectively.

When we focus on the 15 worst-performing months for the S&P 1500 during the same period, the protection provided by the S&P High Yield Dividend Aristocrats was prominent. Its monthly outperformance was 229 bps and 358 bps against the S&P 1500 and S&P 500 High Dividend Index, respectively (see Exhibit 5).

Exhibit 5: Dividend Growers versus High Dividend Payers in Down Markets

Source: S&P Dow Jones Indices LLC. Data from Dec. 31, 1999, to March 31, 2022. Index performance based on total return in USD. Past performance is no guarantee of future results. The S&P High Yield Dividend Aristocrats was launched Nov. 9, 2005. The S&P 500 High Dividend Index was launched Sept. 21, 2015. All data prior to the index launch date is back-tested hypothetical performance. 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 growers may provide some protection when market volatility rises. When the CBOE Volatility Index® (VIX®) increased more than 40% at the end of the month from the beginning of the month, the S&P High Yield Dividend Aristocrats outperformed the benchmark S&P 1500 by 133 bps a month on average. When VIX decreased within a month, there was underperformance on average (see Exhibit 6).

Exhibit 6: Dividend Growers versus High Dividend Payers in Volatile Markets

VIX Monthly Increase (%)	Average Monthly Out/Underperformance of the S&P High Yield Dividend Aristocrats (%)	
	Versus the S&P 1500	Versus the S&P 500 High Dividend Index
>40	1.33	0.07
20-40	1.31	0.98
10-20	0.84	0.27
0-10	0.38	-0.26
<0	-0.31	-0.17

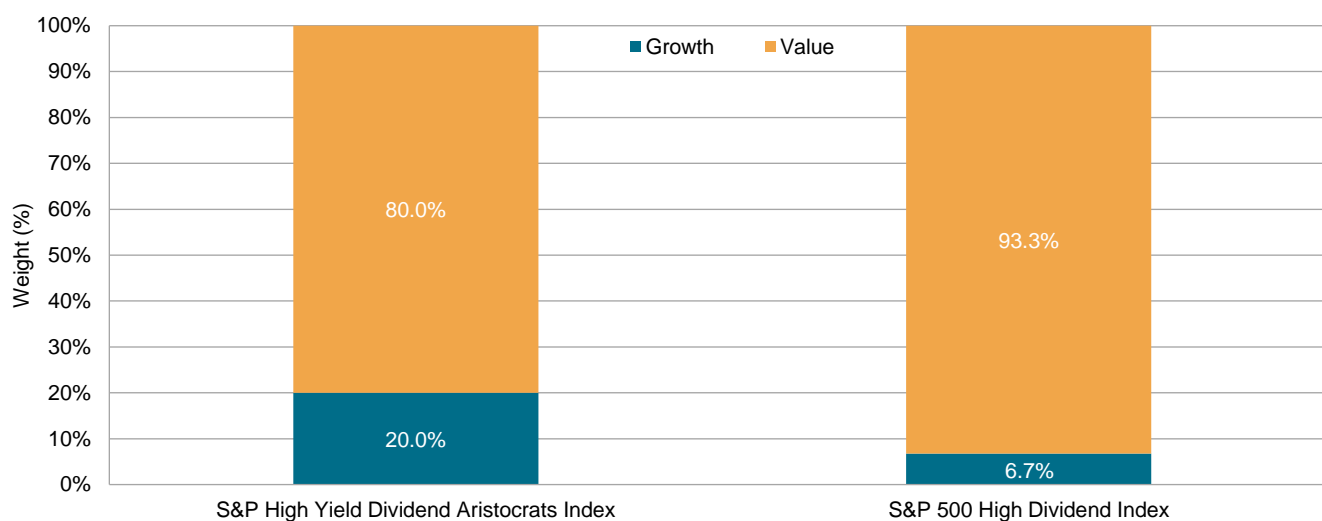
Source: S&P Dow Jones Indices LLC. Data from Dec. 31, 1999, to March 31, 2022. Index performance based on total return in USD. Past performance is no guarantee of future results. The S&P High Yield Dividend Aristocrats was launched Nov. 9, 2005. The S&P 500 High Dividend Index was launched Sept. 21, 2015. All data prior to the index launch date is back-tested hypothetical performance. 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.

Address the Potential Risks Associated with Rising Rates

Dividend growth strategies could potentially address the concerns surrounding the performance of high dividend payers in a rising-rate environment in two ways.

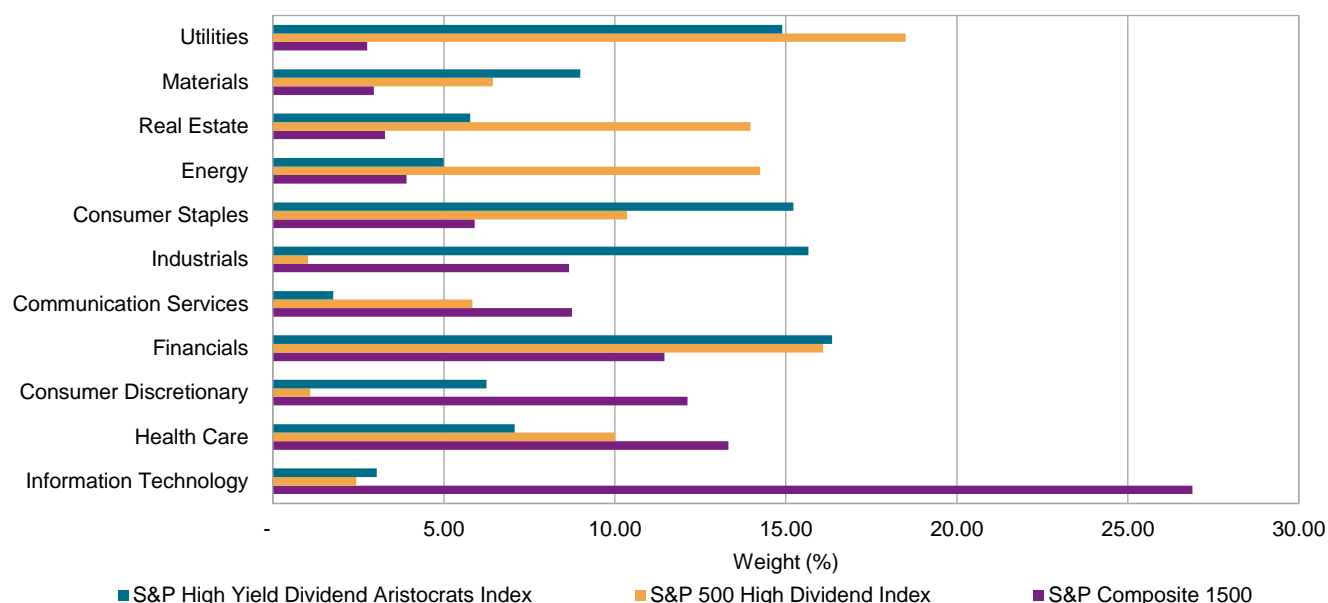
First, because of the focus on increasing dividends rather than high yield, the performance of dividend growers is less driven by the value factor compared with the high dividend payers (see Exhibit 7). The performance of the dividend growers would suffer less in growth markets.

Exhibit 7: Dividend Growers versus High Dividend Payers – Value and Growth Composition



Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Chart is provided for illustrative purposes.

Second, unlike many pure yield strategies, which tend to be concentrated in sectors like Utilities, Financials and Real Estate, dividend growth strategies tend to be more diversified across sectors, and the sector composition tends to be stable over time (see Exhibit 8). Sector diversification could help if there were large moves in performance in particular sectors as an overall market stays in a growth regime.

Exhibit 8a: Dividend Growers versus High Dividend Payers – Sector Composition

Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Chart is provided for illustrative purposes.

Exhibit 8b: Dividend Growers versus High Dividend Payers – Historical Sector Composition

Year	Consumer Discretionary	Consumer Staples	Energy	Financials & Real Estate	Health Care	Industrials	IT	Materials	Communication Services	Utilities
Average Sector Weights Difference (S&P High Yield Dividend Aristocrats – S&P 500 High Dividend Index)										
2006	1.82	5.28	-1.24	-6.27	6.67	4.62	0.96	-3.27	-4.63	-3.93
2007	4.94	2.16	-0.69	1.45	3.71	2.97	0.71	-4.99	-6.44	-3.83
2008	-2.19	2.98	0.00	-7.49	3.53	5.19	2.91	1.58	-5.30	-1.20
2009	0.13	7.19	-1.53	-19.08	4.13	7.31	2.19	1.28	-4.83	3.22
2010	4.52	5.02	-5.59	-8.62	3.50	7.09	1.34	7.54	-4.14	-10.66
2011	3.70	6.67	-2.20	0.14	0.20	6.27	0.56	7.56	-2.57	-20.34
2012	1.77	6.31	-1.25	1.90	1.48	7.33	-0.55	6.06	-3.08	-19.96
2013	-1.08	5.73	-1.22	4.53	3.41	8.74	-3.32	5.98	-2.35	-20.43
2014	-0.87	4.95	-4.67	5.09	2.57	8.92	-1.24	9.14	-2.79	-21.10
2015	-3.29	6.56	-9.32	7.73	3.03	9.10	-1.87	7.72	-2.02	-17.63
2016	-5.36	10.54	-9.30	3.58	2.48	8.06	-2.09	3.78	-2.11	-9.59
2017	-1.93	10.38	-5.73	-4.62	3.22	9.97	-7.23	3.96	-0.82	-7.19
2018	-2.46	7.27	-5.62	-6.01	2.81	12.45	-3.98	6.66	-0.41	-10.71
2019	-6.67	5.38	-8.37	-7.92	4.26	15.57	-5.24	4.79	-0.12	-1.69
2020	0.80	5.78	-6.57	-13.93	0.64	18.08	-4.77	1.89	-3.32	1.41
2021	3.21	8.05	-8.21	-15.56	1.30	14.82	-3.24	3.14	-1.78	-1.73
2022Q1	5.16	4.87	-9.26	-7.93	-2.93	14.63	0.59	2.56	-4.07	-3.62

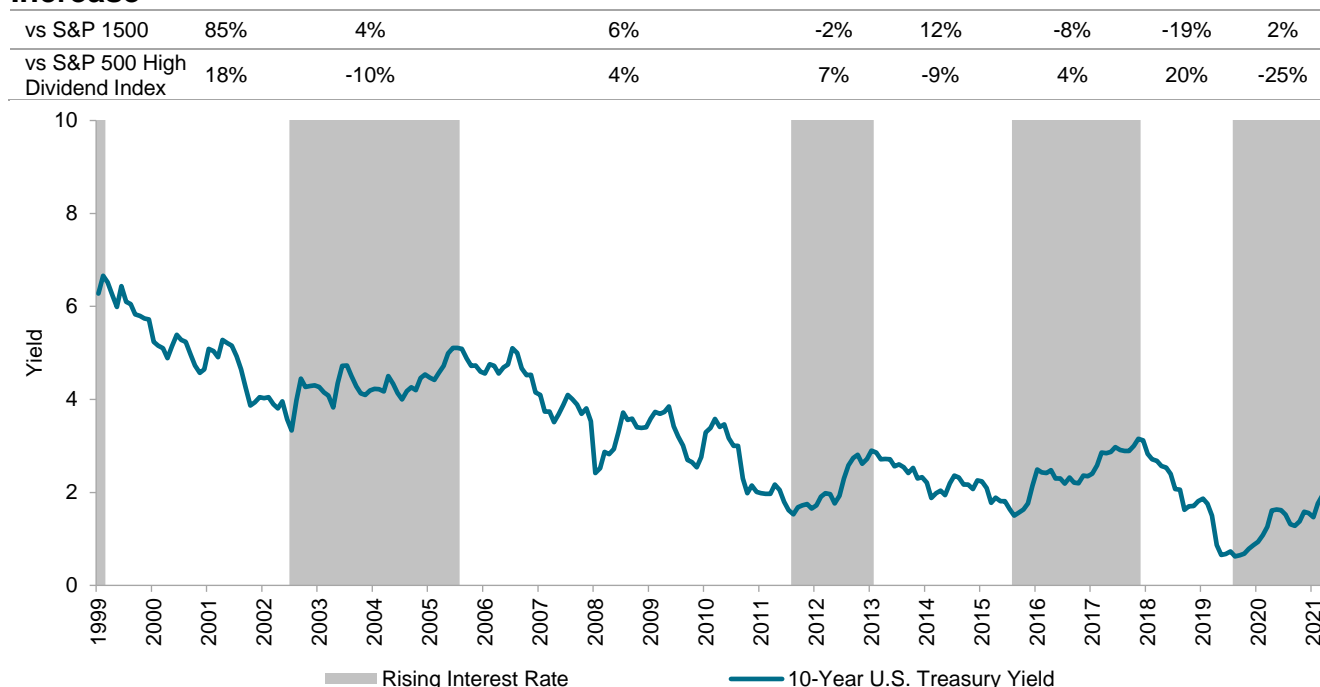
Source: S&P Dow Jones Indices LLC. The sector weights are based on average of 4 quarter-end constituent data for each calendar year from Dec. 31, 2005, to March. 31, 2022. GICS® underwent a structural change in September 2018. The Telecommunication Services sector was expanded to include select companies from other sectors and renamed Communication Services. For more information, please refer to the [2018 GICS Map](#). Table is provided for illustrative purposes.

Research

For use with institutions only, not for use with retail investors.

Nevertheless, there was no clear evidence that dividend growers outperformed high dividend payers in a rising-rate environment when looking at historical performance of the S&P High Yield Dividend Aristocrats versus the S&P 500 High Dividend Index (see Exhibit 9). However, the period is relatively short and only contains a few hike events.

Exhibit 9: Performance of the S&P High Yield Dividend Aristocrats When Interest Rates Increase



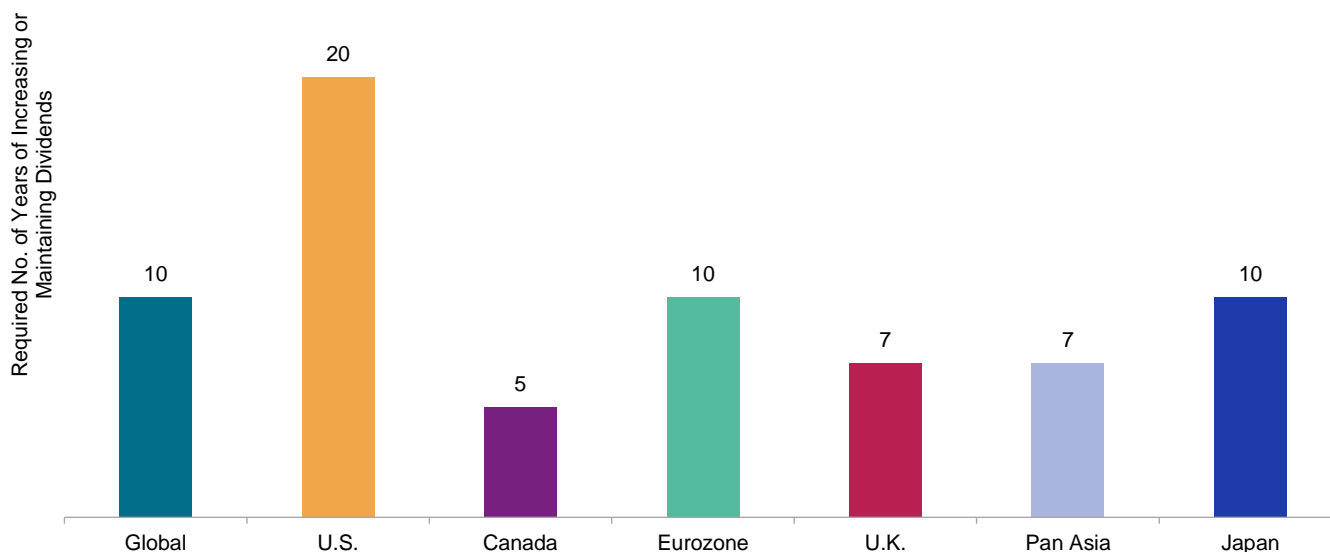
Source: S&P Dow Jones Indices LLC. Data from Dec. 31, 1999, to March 31, 2022. Index performance based on total return in USD. Past performance is no guarantee of future results. The S&P High Yield Dividend Aristocrats was launched Nov. 9, 2005. The S&P 500 High Dividend Index was launched Sept. 21, 2015. All data prior to the index launch date is back-tested hypothetical performance. 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.

In summary, given the focus on quality balance sheets, dividend growth strategies could be attractive to market participants that are worried about volatility and the potential of rising rates but still want to remain invested in equities while generating some income. For market participants focusing on U.S. equities, the S&P High Yield Dividend Aristocrats could provide such a dividend growth solution.

Dividend Growth Strategies in Various Markets

S&P DJI offers dividend growth indices not only in the U.S., but also in many international markets. Given the shorter history and the less-established corporate dividend policies in some international markets compared to the U.S., the 20-year hurdle (of consecutively increasing or maintaining dividends) for index inclusion is relaxed to 5, 7, or 10 years for some regions (see Exhibit 10).

Exhibit 10: Different Requirements for Index Inclusion in Different Regions



*The S&P UK Dividend Aristocrats Index required increasing/stable dividend for at least 10 years prior to June 2018. In an extreme event, a minimum year of dividend growth/maintenance may be relaxed in order to meet target number of constituents.¹

Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Chart is provided for illustrative purposes. Indices used are S&P Global Dividend Aristocrats, S&P Global BMI, S&P High Yield Dividend Aristocrats, S&P Composite 1500, S&P/TSX Canadian Dividend Aristocrats, S&P/TSX Composite, S&P Euro High Yield Dividend Aristocrats, S&P Euro, S&P UK High Yield Dividend Aristocrats, S&P UK BMI, S&P Pan Asia Dividend Aristocrats, S&P Pan Asia BMI, S&P/JPX Dividend Aristocrats and S&P Japan BMI.

A dividend growth strategy could potentially work even better overseas than in the U.S. Our research shows that foreign dividend-paying stocks generally offered higher yields, higher dividend growth and outperformance in the long run.

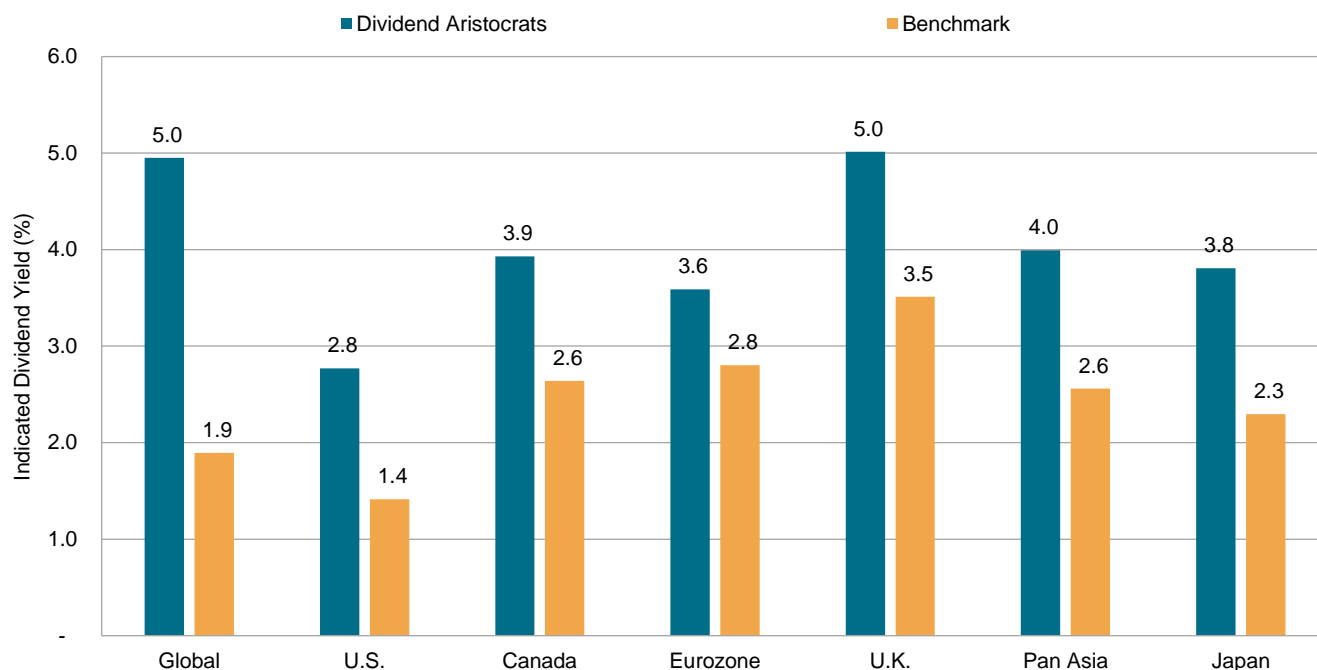
¹ For more information, please refer to the [S&P UK / Euro High Yield Dividend Aristocrats Methodology](#).

Yield

Market participants that are willing to accept the potential risk associated with investing in international equities could find higher dividend yields outside the U.S. As Exhibit 11 illustrates, the yields in all international regions listed were higher than in the U.S.

The yield spreads between the Dividend Aristocrats strategies and the broad market benchmarks ranged from 0.8% to 1.5% for the eurozone, Canada, U.S., Pan Asia, U.K. and Japan. The spread was higher for global markets, at 3.1%. This is mainly due to a country allocation that is driven by yield and deviates from market cap. The [S&P Global Dividend Aristocrats](#) significantly underweighted the U.S. and overweighted Pan Asia and Canada.

Exhibit 11: Dividend Yield – S&P Dividend Aristocrats Indices versus Benchmarks



Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Chart is provided for illustrative purposes. Indices used are S&P Global Dividend Aristocrats, S&P Global BMI, S&P High Yield Dividend Aristocrats, S&P Composite 1500, S&P/TSX Canadian Dividend Aristocrats, S&P/TSX Composite, S&P Euro High Yield Dividend Aristocrats, S&P Euro, S&P UK High Yield Dividend Aristocrats, S&P UK BMI, S&P Pan Asia Dividend Aristocrats, S&P Pan Asia BMI, S&P/JPX Dividend Aristocrats and S&P Japan BMI.

DPS Growth Rate

The S&P High Yield Dividend Aristocrats had a dividend growth rate of 10.01% and 9.84% per year over the past seven and five years, respectively. In international markets, the growth rates were much higher in some cases, such as Japan (see Exhibit 12).²

Exhibit 12: Dividend Growth Rate – S&P Dividend Aristocrats Indices versus Benchmarks

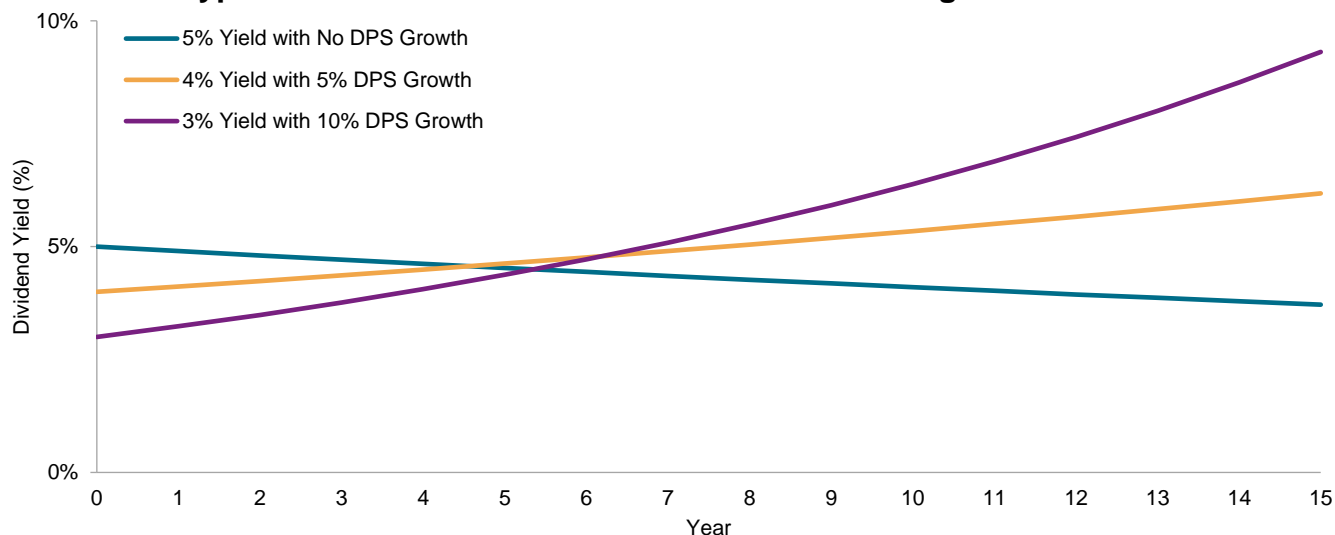
Period	CAGR of Index Dividend Points (%)						
	Global	U.S.	Canada	Eurozone	U.K.	Pan Asia	Japan
Past Seven Years							
Dividend Aristocrats	1.11	10.01	2.88	2.02	-3.78	5.07	12.96
Benchmark	3.58	6.83	3.52	1.52	-3.10	3.16	7.46
Past Five Years							
Dividend Aristocrats	2.21	9.84	0.62	0.88	-5.48	9.46	11.96
Benchmark	3.42	5.65	4.08	-2.63	-4.21	3.96	7.37
Past Three Years							
Dividend Aristocrats	2.15	11.43	-1.81	-3.42	-8.12	5.77	12.48
Benchmark	0.66	4.49	4.30	-6.84	-9.03	0.59	3.41

Source: S&P Dow Jones Indices LLC. Annual dividend data as of Dec. 31, 2021. The S&P/JPX Dividend Aristocrats was launched Dec. 21, 2015. All data prior to index launch date is back-tested, hypothetical performance. 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. Indices used are S&P Global Dividend Aristocrats, S&P Global BMI, S&P High Yield Dividend Aristocrats, S&P Composite 1500, S&P/TSX Canadian Dividend Aristocrats, S&P/TSX Composite, S&P Euro High Yield Dividend Aristocrats, S&P Euro, S&P UK High Yield Dividend Aristocrats, S&P UK BMI, S&P Pan Asia Dividend Aristocrats, S&P Pan Asia BMI, S&P/JPX Dividend Aristocrats and S&P Japan BMI.

² The dividend growth rate is calculated based on dividend points. Dividend points indices seek to track dividend payments in isolation, reflecting the past one-year cumulative dividends of all index shares on a rolling basis. They do not include any changes in market capitalization. The total dividend paid on a given day is calculated as the sum of the dividends per share times the number of shares for all stocks, which is converted into index dividend points by dividing the divisor by the underlying price index.

Based on a hypothetical analysis, dividend growers can typically generate more income over time than stocks with a higher yield but slower dividend growth. While the yield on a dividend grower may be initially lower than a higher-yield stock, a rising dividend and an increasing stock price can result in a stronger long-term total return. Exhibit 13 shows three hypothetical scenarios to demonstrate how dividend growth stocks could slowly but steadily add value to a portfolio.

Exhibit 13: Hypothetical Dividend Growth Scenarios Assuming 2% Annual Price Return

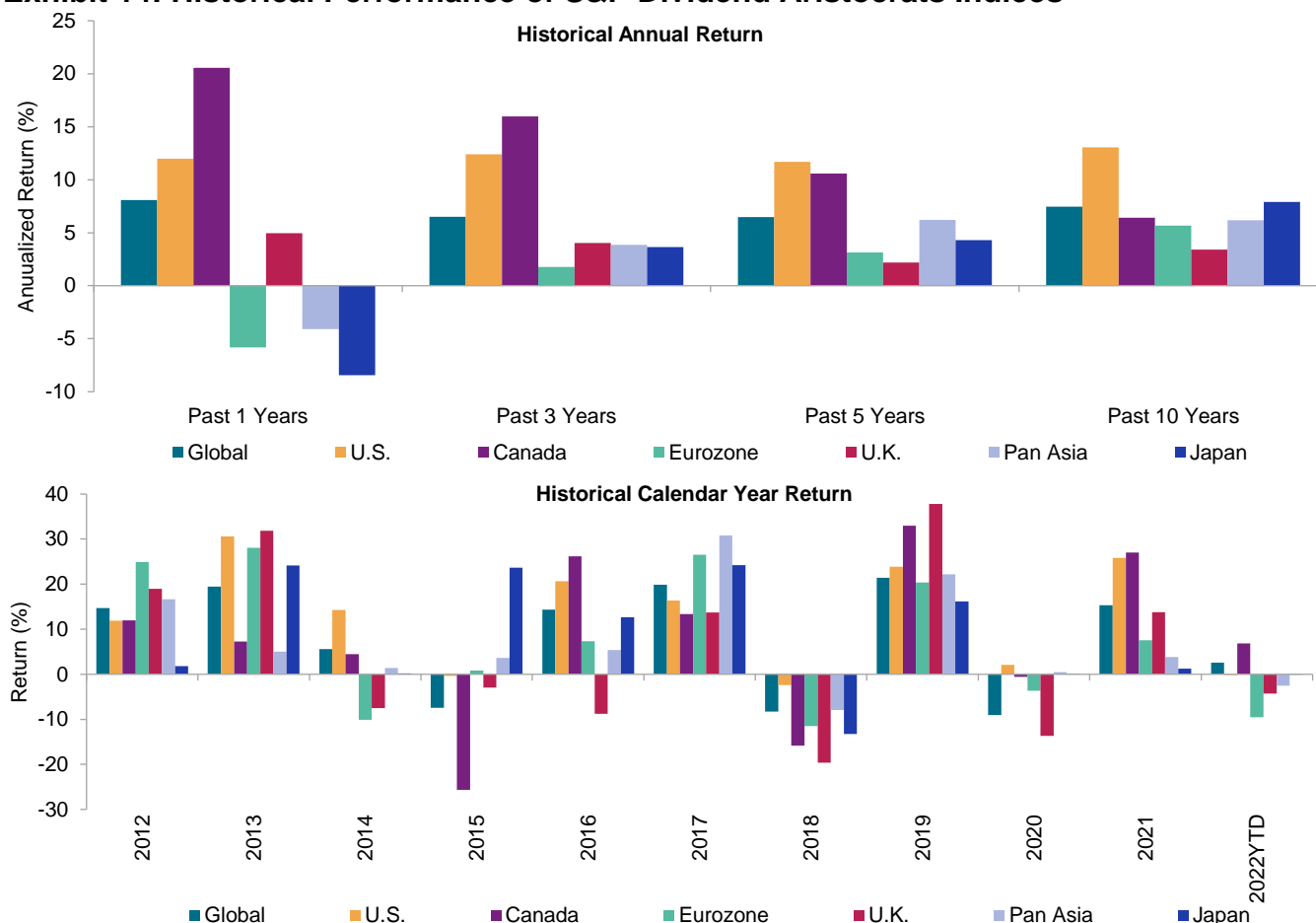


Source: S&P Dow Jones Indices LLC. Strategies shown are based on a hypothetical index using the hypothetical dividend yields and dividend-per-share growth rates. Chart is provided for illustrative purposes.

Total Return

Investing outside the U.S. increases diversification, and it could increase total return as well. This argument applies to the dividend growth strategies as well.

Compared with S&P Dividend Aristocrats Indices in international markets, the S&P High Yield Dividend Aristocrats has provided outperformance in terms of total return over the past 5- and 10-year periods (see Exhibit 14). Nevertheless, there have been several periods when international stocks outperformed U.S. stocks. For example, the eurozone, the U.K., Pan Asia and global markets outperformed the S&P High Yield Dividend Aristocrats in 2012. The U.K. and Canada did well in 2019 (see Exhibit 14).

Exhibit 14: Historical Performance of S&P Dividend Aristocrats Indices

Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Index performance based on total return in USD. The S&P Global Dividend Aristocrats was launched March 26, 2013. The S&P Euro High Yield Dividend Aristocrats and S&P UK High Yield Dividend Aristocrats was launched Jan. 31, 2012. The S&P/JPX Dividend Aristocrats was launched Dec. 21, 2015. 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. Indices used are S&P Global Dividend Aristocrats, S&P High Yield Dividend Aristocrats, S&P/TSX Canadian Dividend Aristocrats, S&P Euro High Yield Dividend Aristocrats, S&P UK High Yield Dividend Aristocrats, S&P Pan Asia Dividend Aristocrats and S&P/JPX Dividend Aristocrats.

Conclusion

There are clear distinctions that set dividend growers apart from other dividend stocks. Dividend growers, which tend to be quality companies, have generally shown greater resilience in unsteady markets and could address concerns about dividend stocks in a rising-rate environment, to some extent. This argument not only applies to the U.S. large-cap space, but it also extends to small- and mid-cap segments and international markets.

Therefore, for market participants that are worried about volatility but want to remain allocated to equities while generating some income, dividend growers could be a useful instrument. The S&P High Yield Dividend Aristocrats and the various international S&P Dividend Aristocrats Indices could provide efficient, transparent, rules-based tools to access such strategies.

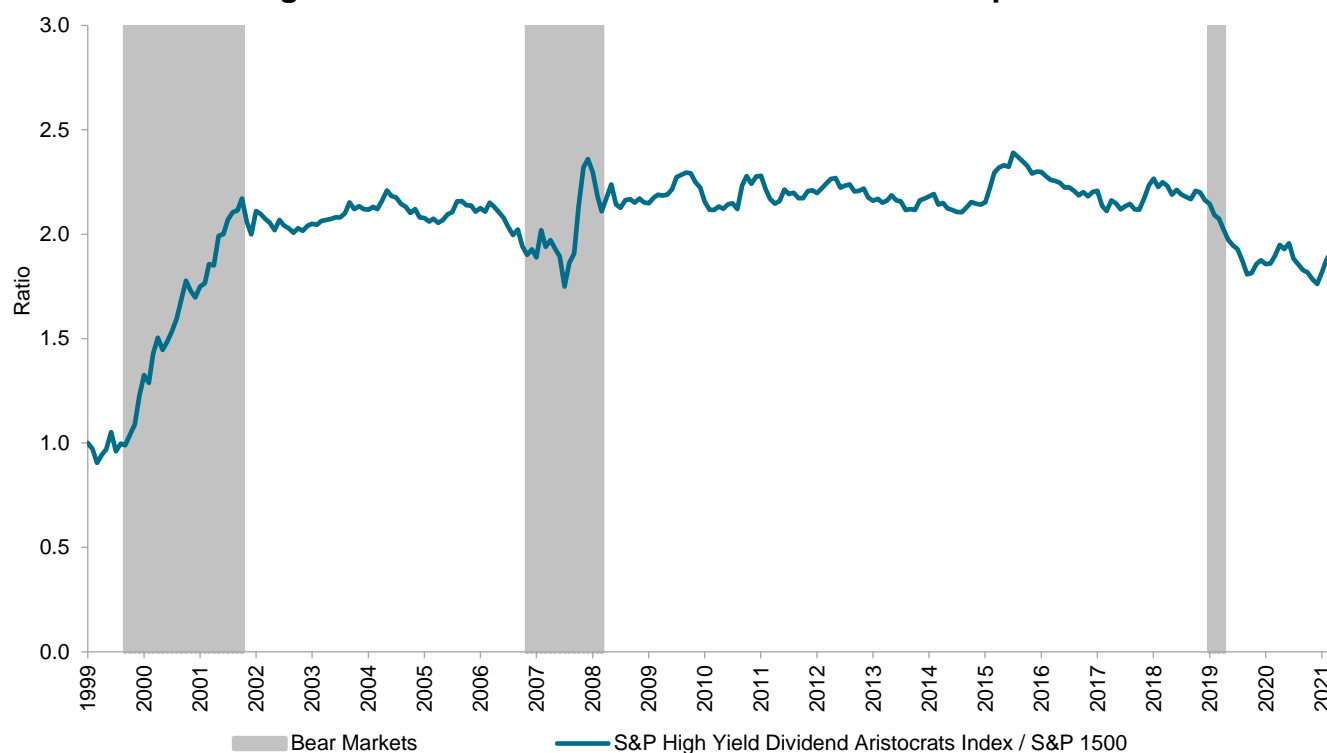
Appendix

Exhibit 15: Dividend Growers versus High Dividend Payers – Index Overview

Category	Dividend Growers	High Dividend Payers
Index	S&P High Yield Dividend Aristocrats	S&P 500 High Dividend Index
Universe	S&P Composite 1500 with size and liquidity criteria	S&P 500
Selection	Increased dividend every year for at least 20 years	80 highest-yielding companies
Weighting	By indicative dividend yield; individual stocks are capped at 4%	Equal
Number of Constituents	Variable, 119 as of March 31, 2022	80

Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Table is provided for illustrative purposes.

Exhibit 16: S&P High Yield Dividend Aristocrats versus S&P Composite 1500



Source: S&P Dow Jones Indices LLC. Data from Dec. 31, 1999, to March 31, 2022. Index performance based on total return in USD. The S&P High Yield Dividend Aristocrats was launched Nov. 9, 2005. All data prior to the index launch date is back-tested hypothetical performance. 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.

Exhibit 17: S&P High Yield Dividend Aristocrats – Calendar Year Return

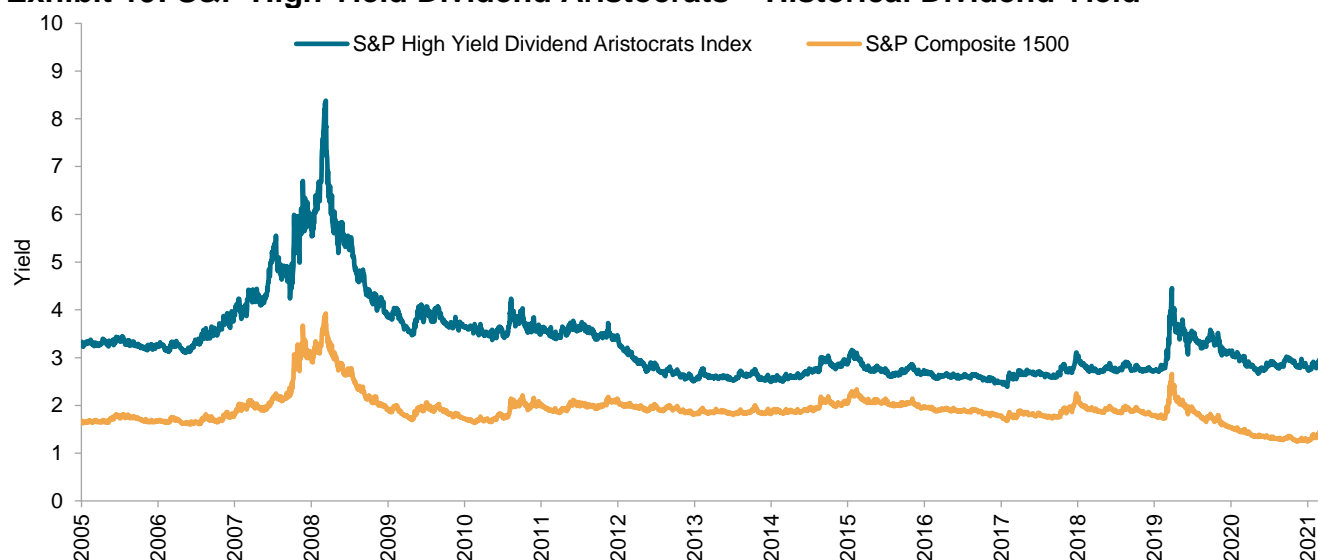
Year	S&P High Yield Dividend Aristocrats	S&P Composite 1500
2002	-5.05	-21.31
2003	25.89	29.59
2004	15.43	11.78
2005	3.65	5.66
2006	18.00	15.34
2007	-6.26	5.47
2008	-23.01	-36.72
2009	18.94	27.25
2010	16.80	16.38
2011	7.63	1.75
2012	11.88	16.17
2013	30.59	32.80
2014	14.27	13.08
2015	-0.38	1.01
2016	20.68	13.03
2017	16.35	21.13
2018	-2.42	-4.96
2019	23.88	30.90
2020	2.06	17.92
2021	25.85	28.45
2022YTD	-0.15	-4.64

Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Index performance based on total return in USD. Past performance is no guarantee of future results. The S&P High Yield Dividend Aristocrats was launched Nov. 9, 2005. The S&P 500 High Dividend Index was launched Sept. 21, 2015. All data prior to the index launch date is back-tested hypothetical performance. 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.

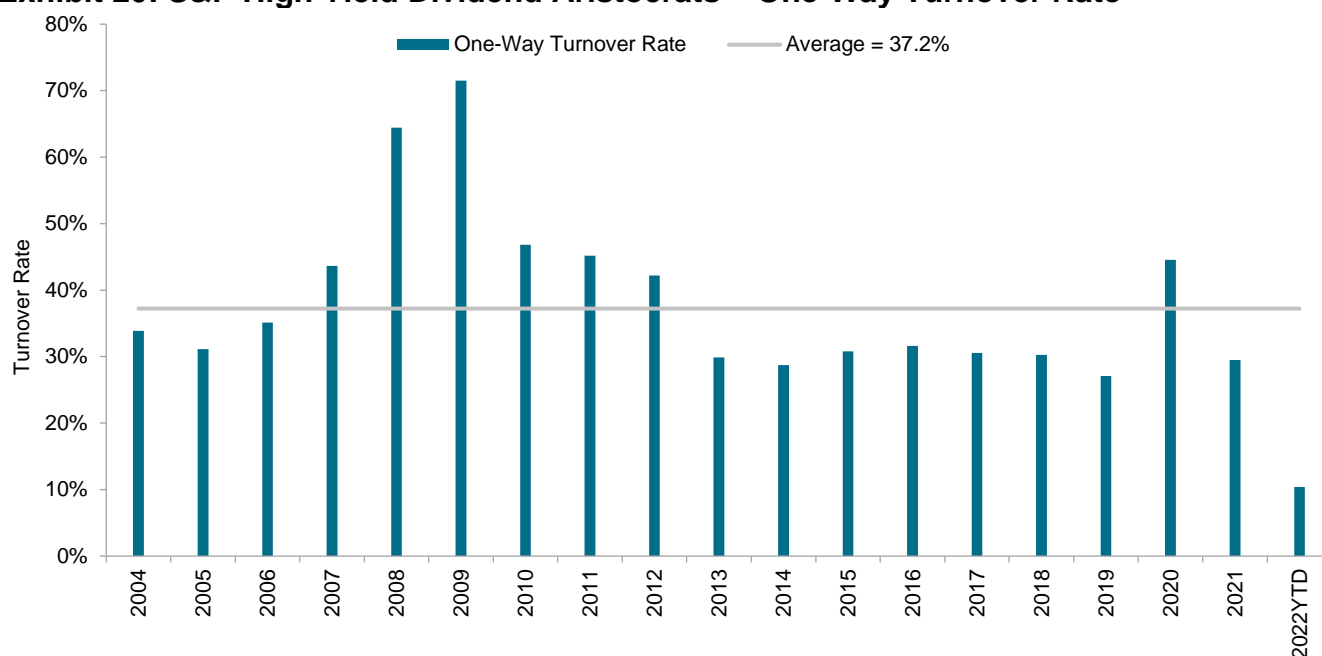
Exhibit 18: S&P High Yield Dividend Aristocrats – Risk/Return Profile

Period	S&P High Yield Dividend Aristocrats	S&P Composite 1500
Annual Return (%)		
1-Year	11.97	14.57
3-Year	12.41	18.49
5-Year	11.69	15.53
10-Year	13.07	14.43
15-Year	9.41	10.23
Annual Volatility (%)		
3-Year	17.84	18.01
5-Year	15.40	16.01
10-Year	12.91	13.40
15-Year	15.37	15.69
Annual Return/Annual Volatility		
3-Year	0.70	1.03
5-Year	0.76	0.97
10-Year	1.01	1.08
15-Year	0.61	0.65

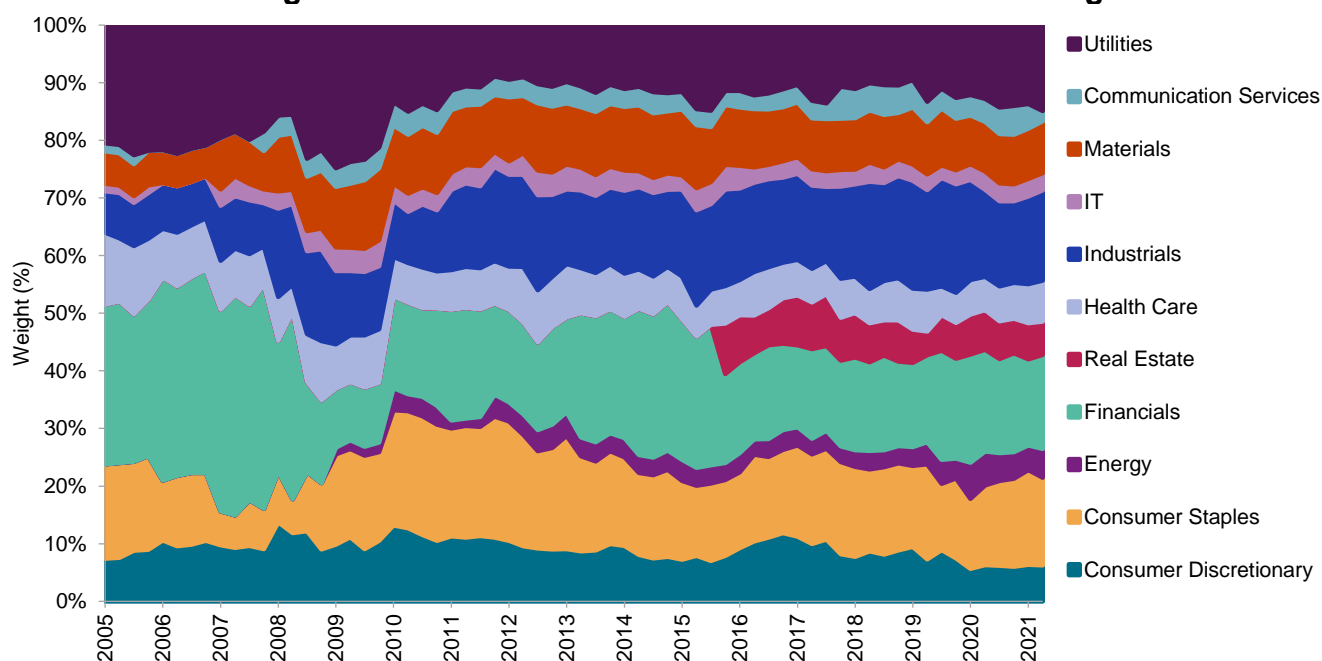
Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Index performance based on total return in USD. Past performance is no guarantee of future results. The S&P High Yield Dividend Aristocrats was launched Nov. 9, 2005. The S&P 500 High Dividend Index was launched Sept. 21, 2015. All data prior to the index launch date is back-tested hypothetical performance. 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 19: S&P High Yield Dividend Aristocrats – Historical Dividend Yield

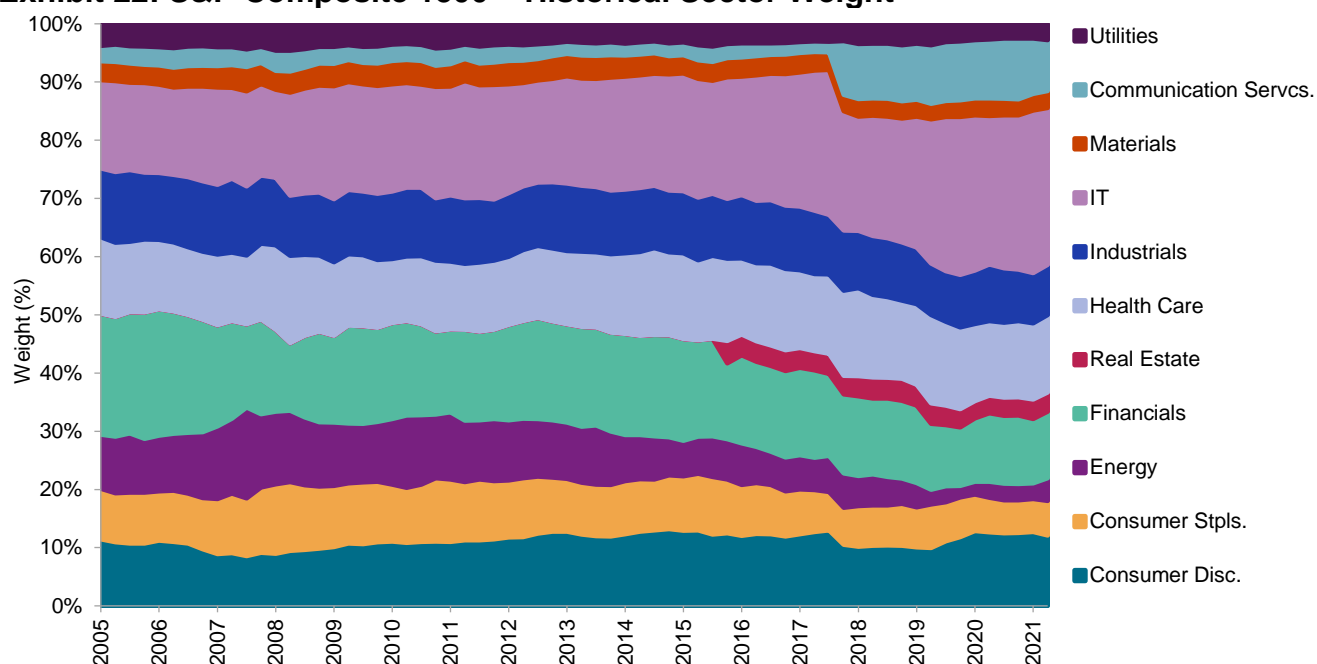
Source: S&P Dow Jones Indices LLC. Data from Dec. 31, 2005, to March 31, 2022. Chart is provided for illustrative purposes.

Exhibit 20: S&P High Yield Dividend Aristocrats – One-Way Turnover Rate

Source: S&P Dow Jones Indices LLC. Data from Dec. 31, 2003, to March 31, 2022. The S&P High Yield Dividend Aristocrats was launched Nov. 9, 2005. The S&P 500 High Dividend Index was launched Sept. 21, 2015. All data prior to the index launch date is back-tested hypothetical performance. 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 21: S&P High Yield Dividend Aristocrats – Historical Sector Weight

Source: S&P Dow Jones Indices LLC. Quarterly constituent data as of March 31, 2022. Chart is provided for illustrative purposes.

Exhibit 22: S&P Composite 1500 – Historical Sector Weight

Source: S&P Dow Jones Indices LLC. Quarterly constituent data as of March 31, 2022. Chart is provided for illustrative purposes.

Exhibit 23: Annual Return (%) – S&P Dividend Aristocrats Indices versus Benchmarks

Region	Past 10 Years		Past 5 Years		Past 3 Years	
	Dividend Aristocrats	Benchmark	Dividend Aristocrats	Benchmark	Dividend Aristocrats	Benchmark
Global	7.47	10.41	6.48	11.71	6.50	13.74
U.S.	13.07	14.43	11.69	15.53	12.41	18.49
Canada	8.81	9.08	9.13	10.34	13.40	14.15
Eurozone	7.63	9.02	2.40	5.66	2.16	8.19
U.K.	5.42	7.03	1.14	4.45	3.66	4.66
Pan Asia	6.18	6.65	6.21	7.00	3.86	7.22
Japan	12.31	11.00	6.14	7.63	7.12	9.36

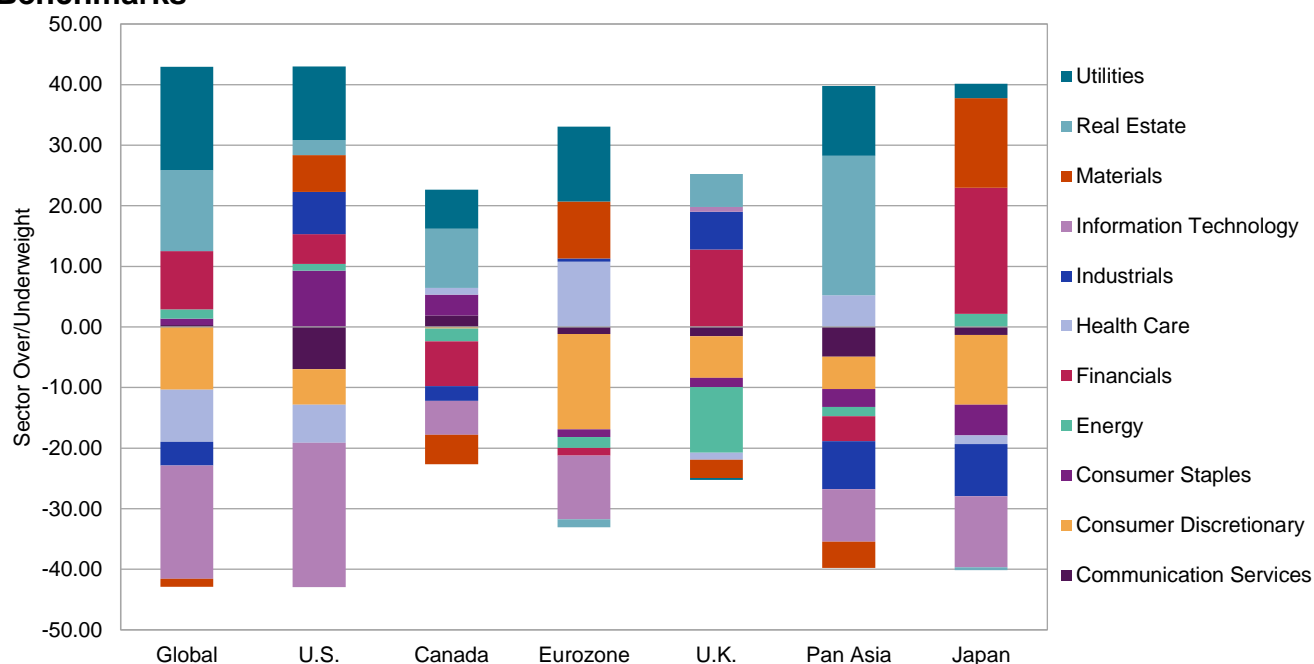
Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Index performance based on total return in local currency. Past performance is no guarantee of future results. The S&P/JPX Dividend Aristocrats was launched Dec. 21, 2015. All data prior to the index launch date is back-tested hypothetical performance. 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. Indices used are S&P Global Dividend Aristocrats, S&P Global BMI, S&P High Yield Dividend Aristocrats, S&P Composite 1500, S&P/TSX Canadian Dividend Aristocrats, S&P/TSX Composite, S&P Euro High Yield Dividend Aristocrats, S&P Euro, S&P UK High Yield Dividend Aristocrats, S&P UK BMI, S&P Pan Asia Dividend Aristocrats, S&P Pan Asia BMI, S&P/JPX Dividend Aristocrats and S&P Japan BMI.

Exhibit 24: Risk-Adjusted Return – S&P Dividend Aristocrats Indices versus Benchmarks

Region	Past 10 Years		Past 5 Years		Past 3 Years	
	Dividend Aristocrats	Benchmark	Dividend Aristocrats	Benchmark	Dividend Aristocrats	Benchmark
Global	0.51	0.78	0.38	0.76	0.32	0.78
U.S.	1.01	1.08	0.76	0.97	0.70	1.03
Canada	0.70	0.80	0.57	0.74	0.70	0.89
Eurozone	0.54	0.59	0.15	0.34	0.11	0.42
U.K.	0.42	0.58	0.07	0.32	0.21	0.29
Pan Asia	0.47	0.51	0.46	0.51	0.25	0.48
Japan	0.84	0.68	0.40	0.52	0.42	0.60

Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Index performance based on total return in local currency. Past performance is no guarantee of future results. The S&P/JPX Dividend Aristocrats was launched Dec. 21, 2015. All data prior to the index launch date is back-tested hypothetical performance. 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. Indices used are S&P Global Dividend Aristocrats, S&P Global BMI, S&P High Yield Dividend Aristocrats, S&P Composite 1500, S&P/TSX Canadian Dividend Aristocrats, S&P/TSX Composite, S&P Euro High Yield Dividend Aristocrats, S&P Euro, S&P UK High Yield Dividend Aristocrats, S&P UK BMI, S&P Pan Asia Dividend Aristocrats, S&P Pan Asia BMI, S&P/JPX Dividend Aristocrats and S&P Japan BMI.

Exhibit 25: Sector Over/Underweight – S&P Dividend Aristocrats Indices versus Benchmarks



Source: S&P Dow Jones Indices LLC. Data as of March 31, 2022. Chart is provided for illustrative purposes.

Performance Disclosure/Back-Tested Data

The S&P High Yield Dividend Aristocrats was launched November 9, 2005. The S&P 500 High Dividend Index was launched September 21, 2015. The S&P Global Dividend Aristocrats was launched March 26, 2013. The S&P Euro High Yield Dividend Aristocrats and S&P UK High Yield Dividend Aristocrats was launched January 31, 2012. The S&P/JPX Dividend Aristocrats was launched December 21, 2015. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance, and is based on the index methodology 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. In addition, forks have not been factored into the back-tested data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Complete index methodology details are available at www.spglobal.com/spdji. 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).

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