

Investing Across the Shareholder Yield Spectrum Involves Trade-Offs

Dividend and buyback-focused portfolios vary by income, risk, and return.

Morningstar Indexes Research

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Executive Summary

Stock buybacks in the U.S. market reached historic highs in 2021 and 2022 by dollar value. Companies included in the Morningstar US Market Index conducted \$921.9 billion worth of share repurchases in 2021 followed by \$1,010.1 billion in 2022¹, well surpassing the dividend payout of \$586.1 billion and \$646.3 billion during the same years, respectively.

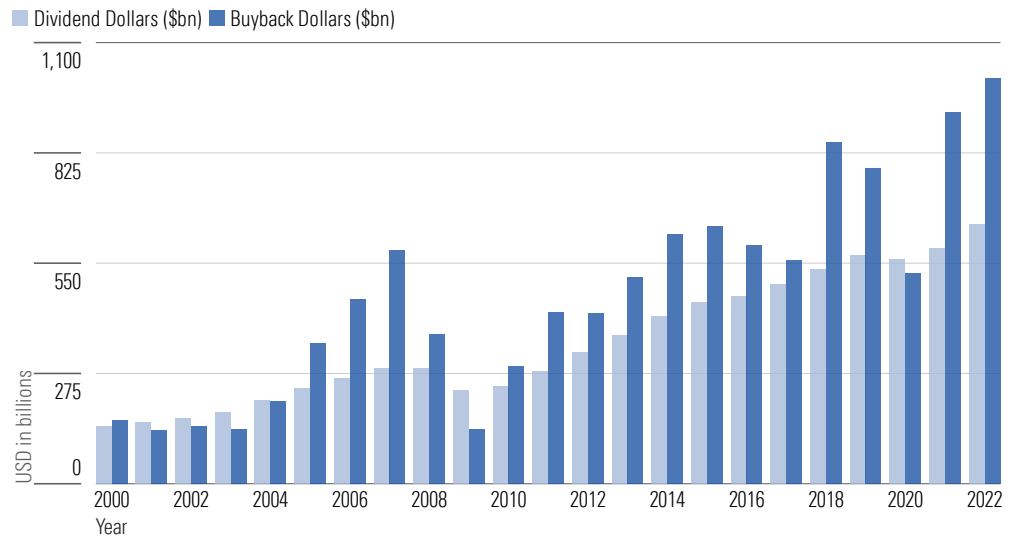
An investor relying on dividends alone might overlook companies that repay capital to shareholders primarily via stock buybacks. Both dividends and buybacks are a form of capital repayment to shareholders, and according to Modigliani and Miller's theorem², investors should be indifferent between receiving capital distributions via dividends or buybacks. While the irrelevance theorem may hold true from the shareholder's perspective, emphasizing dividends versus buybacks, at the portfolio level, involves consequences. In our analysis, we conclude that investment strategies focused on different forms of shareholder payout come with trade-offs related to income, risk/return, and sectoral biases.

Buybacks—An Increasingly Focal Component of Corporate Payout Policy

Prior to 1982, U.S. companies were wary of repurchasing their own shares because the Securities Exchange Act of 1934 empowered the SEC to curb fraudulent and manipulative practices in stock trading. However, the adoption of SEC Rule 10b-18 provided a safe zone to U.S. companies to trade their own stocks under certain conditions, thus propelling stock buyback programs. Exhibit 1 summarizes the aggregate dollar value of dividends and stock buybacks for U.S. companies starting from 2000.

¹ As of latest available data based on annual company filings for 2022.

² Miller, M.H., & Modigliani, F. 1961. "Dividend Policy, Growth, and the Valuation of Shares." *Journal of Business*, Vol. 34, No. 4 (October), P. 411.

Exhibit 1 Buyback Dollars Exceeded Dividend Dollars in Majority of the Years Since 2000

Source: Morningstar.

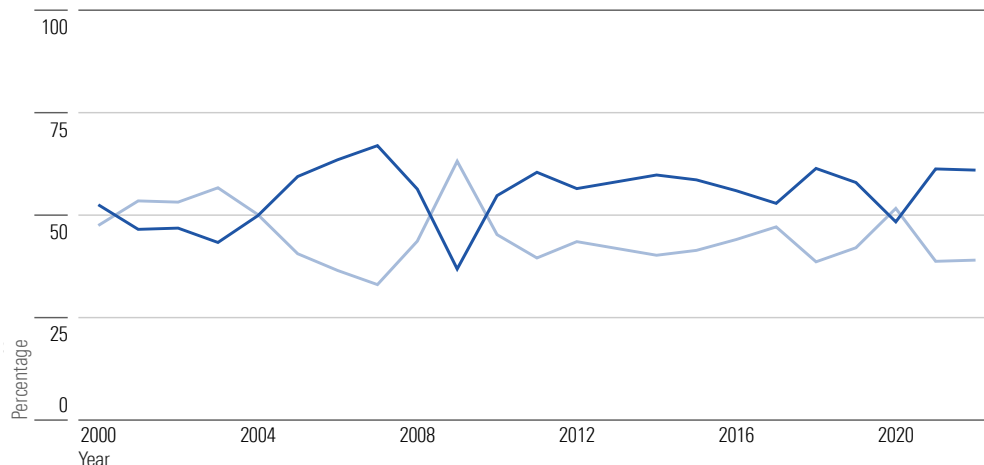
Since 2005, the dollar value of buyback payouts has exceeded the value of payouts from dividends for all but two calendar years. Interestingly, those two years coincided with turbulent market environments: 2009 and 2020. During the financial crisis of 2008-09, dividend dollar payouts fell by approximately 18% while buyback payouts fell by around 75% from their respective levels in 2007. Buyback activities eventually picked up and surpassed dividend payouts by 2010. By 2014, buybacks surpassed the previous high from 2007. The bounceback in buyback activity was sharp and high in 2021, increasing by 75% from 2020 when buybacks totaled \$525 billion. This sharp rise in buyback activities, fueled mainly by companies in three sectors — communication services, technology, and financial services — also coincided with the rise in the Morningstar US Market Index levels.

For Morningstar US Market Index companies, on average, buybacks have accounted for 55% of the total value of shareholder distributions over the past 20 years, suggesting that companies now prefer³ returning capital via stock buybacks, rather than dividends.

³ To understand why companies might prefer buybacks, refer to "Dividends and Buybacks Paint a More Complete Picture Together" by Alex Bryan, Morningstar Index Insights, 2021.

Exhibit 2 On Average, Buyback Contribution to Total Payout Dollars Has Been Higher Than Dividend

— Div as % of Total Payout — Buyback as % of Total Payout



Source: Morningstar.

By size, large-cap companies account for approximately 75% of total buybacks (by dollar value) followed by mid-cap (around 20%) and small-cap (around 5%). The top 15 companies, by average of buyback payout dollars for last five years, have historically accounted for approximately 35% of total buybacks by dollar value.

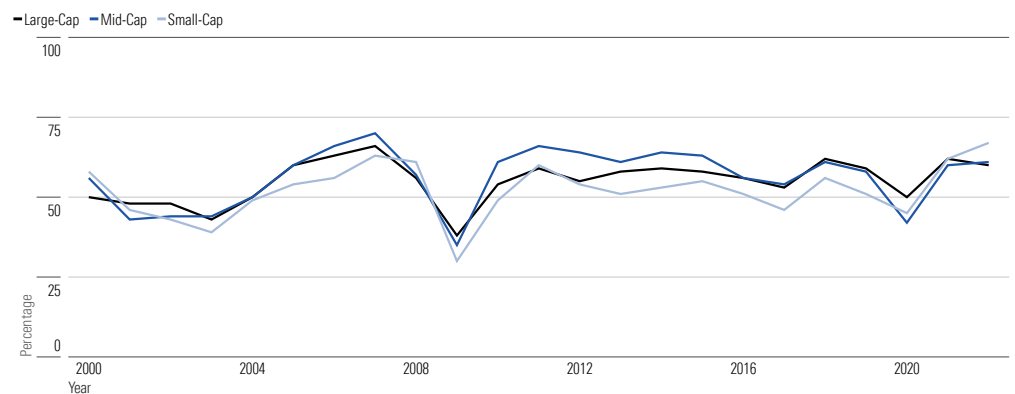
Exhibit 3 Top 15 Companies by Average Buyback Payout Dollars for Last Five Years (2018-22)

| Company Name | Sector | \$ Buyback payout (billions) | \$ Div payout (billions) | Total \$ payout (billions) |
|------------------------------|------------------------|------------------------------|--------------------------|----------------------------|
| Apple Inc. | Technology | 78.66 | 13.89 | 92.56 |
| Meta Platforms, Inc. Class A | Communication Services | 36.25 | - | 36.25 |
| Alphabet Inc A | Communication Services | 33.45 | - | 33.45 |
| Microsoft Corp | Technology | 22.48 | 15.93 | 38.41 |
| Oracle Corp | Technology | 19.93 | 3.07 | 22.99 |
| Bank of America Corp | Financial Services | 17.09 | 6.15 | 23.24 |
| JP Morgan Chase & Co | Financial Services | 14.41 | 10.45 | 24.86 |
| Wells Fargo & Co | Financial Services | 13.50 | 5.49 | 18.99 |
| Berkshire Hathaway B | Financial Services | 13.16 | - | 13.16 |
| Visa Inc A | Financial Services | 9.71 | 2.30 | 12.01 |
| Charter Communications Inc A | Communication Services | 9.63 | - | 9.63 |
| Procter & Gamble | Consumer Defensive | 9.30 | 8.17 | 17.47 |
| Citigroup Inc | Financial Services | 9.16 | 4.04 | 13.20 |
| Cisco Systems Inc | Technology | 8.99 | 6.01 | 15.00 |
| Lowe's Cos Inc | Consumer Cyclical | 8.71 | 1.86 | 10.58 |

Source: Morningstar.

Although a few large companies account for a significant portion of buyback payouts, the higher contribution of buybacks to total payouts holds across the company size spectrum. The contribution of buybacks to total payouts averaged 55%, 56%, and 52% for large-cap, mid-cap, and small-cap companies, respectively.

Exhibit 4 Across Large-Cap, Mid-Cap, and Small-Cap Companies, on Average, the Buyback Component of Total Payout Dollars Has Been Higher Than 50%

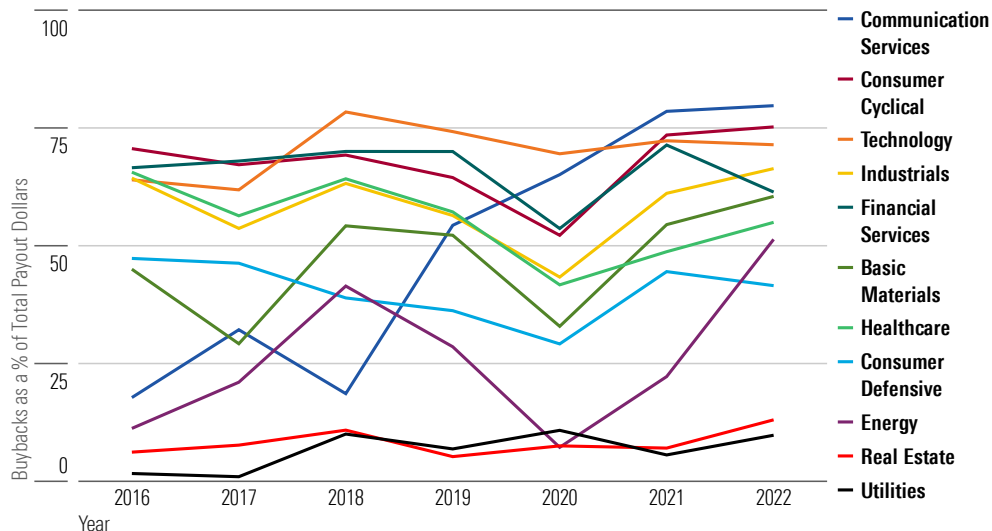


Source: Morningstar.

On a sector level, in seven of eleven economic groupings, buybacks have been the preferred mode of capital redistribution. The communication services, consumer cyclical, technology, industrials, financial services, basic materials, and healthcare sectors, which collectively represent 83% of U.S. market value⁴, preferred buybacks to dividends the most. Meanwhile, consumer defensive, energy, real estate, and utilities companies, which represent 17% of the market, preferred dividends.

⁴ As of March 31, 2023.

Exhibit 5 Across Large-Cap, Mid-Cap, and Small-Cap Companies, on Average, the Buyback Component of Total Payout Dollars Has Been Higher Than 50%



Source: Morningstar.

The rise of buybacks has prompted extensive academic research on the phenomenon. Several studies have documented the evolution of corporate payouts highlighting an increase in both number and dollar value of companies repurchasing shares⁵. Companies execute stock buybacks through various means: open market repurchase, fixed price tender offer, dutch auction tender offer, privately negotiated repurchase, and accelerated share repurchase. Open market repurchases, however, are the most prevalent⁶. Dividends and buybacks also differ in terms of their payout characteristics. Jagannathan, Stephens, and Weisbach⁷ show that, while dividend payouts are stickier and more permanent in nature, buybacks are paid out from temporary earnings and thus cyclical in nature. Buybacks also offer more financial flexibility to managers in terms of cash distribution⁸.

Grullon and Michaely⁴ studied the characteristics of companies conducting buybacks and dividends where they classify companies into four types: (1) dividend paying, (2) repurchasing, (3) dividend paying and repurchasing, and (4) nonpaying. According to their study, dividend-paying companies tend to be large, more profitable, and have less volatile returns on assets compared with repurchasing and nonpaying companies. Smaller companies with high valuation ratios and more-volatile earnings tend to fall in the nonpaying category.

⁵ Grullon, G., & Michaely, R. 2002. "Dividends, Share Repurchases, and the Substitution Hypothesis." *Journal of Finance* 57 (4): 1649–84; Skinner, Douglas. 2008. "The Evolving Relation between Earnings, Dividends, and Stock Repurchases."

⁶ Grullon, G., and D. L. Ikenberry. 2000. "What Do We Know about Stock Repurchases?" *Journal of Applied Corporate Finance*, Vol. 13, No. 1, P. 31.

⁷ Jagannathan, M., Stephens, C.P., & Weisbach, M.S. 2000. "Financial Flexibility and the Choice between Dividends and Stock Repurchases." *Journal of Financial Economics*, Vol 57, No. 3, P. 355.

⁸ Brav, A., Graham, J.R., Harvey, C.R., & Michaely, R. 2005. "Payout Policy in the 21st Century." *Journal of Financial Economics*, Vol. 77, No. 3, P. 483.

The asset-pricing implications of total payout yield were addressed by Morningstar's Philip Straehl along with Roger Ibbotson⁹. They developed three total payout models of stock returns that attribute long-run historical equity returns entirely to the supply of total payouts. Massa, Rehman, and Vermaelen¹⁰ studied the effects of announcements of stock buybacks on subsequent stock price returns. They find that repurchasing companies in low-concentration industries outperform the market, their nonrepurchasing peers, and their more-concentrated counterparts. Also, companies experiencing negative returns preceding OMRs exhibit positive abnormal returns in subsequent periods¹¹. This supports the view that "undervaluation" is a major motivator for stock buybacks, a view echoed by the majority of corporate executives surveyed by Brav et al⁷. Most executives in the survey also agree that buyback decisions are contingent on excess cash or liquid assets.

One of the criticisms is that buybacks come at the cost of investment—that dollars spent on buybacks could be spent on profitable investment opportunities. However, findings suggest that the U.S. economy has done an efficient job at recycling share repurchase capital¹². Because of the concerns around repurchases and investments, share repurchases net of issuances represent a better picture of capital left for reinvestment. For investors who hold their shares, net buyback (repurchase net of equity issuance) thus provides an increased fractional ownership of the company and its future cash flows.

Researchers have also found support for the Agency Hypothesis, which states that companies with excess cash are inclined to engage in value-destroying projects, and as such, buybacks can act as a leash on the excess cash dilemma. Other motives that have been linked to stock buybacks include employee incentives¹³, including earnings-per-share-based CEO compensation and takeover deterrence where corporate raiders greenmail companies into buying back shares at premium¹⁴.

Incorporating Buyback Exposure in a Portfolio

When companies mature, they often generate cash in excess of their growth and reinvestment needs. If managers cannot find investment opportunities that will generate excess return, they should ideally return capital to shareholders.

For companies in the United States, a market where investors are highly sensitive to dividend cuts, managers strive to maintain a regular dividend. By contrast, stock buybacks bear little obligation for managers, and thus offer flexibility. This also explains why buyback payouts are more volatile than dividend payouts and are cut first during crises, as displayed in Exhibit 1.

9 Straehl, P. & Ibbotson, R. 2017. "The Long-Run Drivers of Stock Returns: Total Payouts and the Real Economy." *Financial Analysts Journal*, Vol. 73, No. 3, P. 32.

10 Massa, M., Rehman, Z., & Vermaelen, T. 2007. "Mimicking Repurchases." *Journal of Financial Economics*, Vol. 84, No. 3, P. 624.

11 Peyer, U., & Vermaelen, T. 2009. "The Nature and Persistence of Buyback Anomalies." *Review of Financial Studies*, Vol. 22, No. 4, P. 1,693.

12 Sterling, C., & Wane, I. 2019. "Buybacks – A multi-perspective review and thoughts on best practices for company buyback policies." Amundi Asset Management, Discussion Paper, Cross Asset Investment Strategy.

13 Kahle, K.M. 2002. "When a Buyback Isn't a Buyback: Open Market Repurchases and Employee Options." *Journal of Financial Economics*, Vol. 63, No. 2, P. 235.

14 Peyer, U., & Vermaelen, T. 2005. "The Many Facets of Privately Negotiated Stock Repurchases." *Journal of Financial Economics*, Vol. 75, No. 2, P. 361.

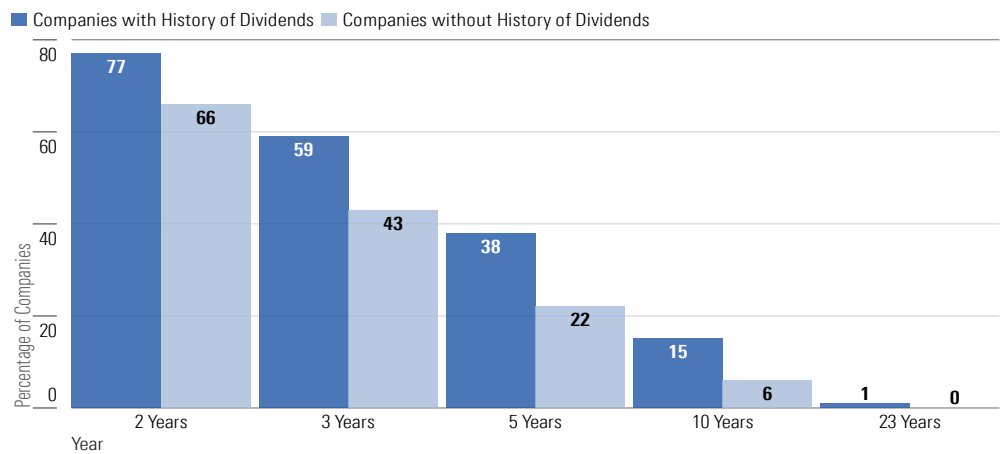
From the shareholder’s perspective, dividends are cash in hand. In the case of buybacks, only those shareholders who tender their shares on a proportionate basis receive cash, while remaining shareholders get a larger ownership stake in the company owing to a decrease in the number of shares. Index investors fall in the category of buy-and-hold shareholders, who benefit from buybacks via an increased ownership stake in the company.

Increased usage of buybacks warrants close attention from income investors. Given the rise in magnitude of buybacks, do passive equity-income strategies focusing solely on dividends lose out by neglecting buyback dollars? Interestingly, 80% of buyback dollars are paid out by companies that also pay dividends. This means that dividend portfolios will inevitably have some exposure to buybacks. Passive equity-income strategies typically prioritize dividend yield. Because dividends are sticky in nature, historical dividend yield is a reasonable proxy for expected dividend yields and, thus, selecting stocks based on historical dividend yield is a widely used index strategy.

The idea of using buyback yield as a security-selection criterion poses a question: Because buybacks are not obligatory and often fluctuate from year to year, can we create portfolios based on historical buyback ratio/buyback yield to capture future buyback activity? Buy-and-hold shareholders would benefit from capturing the price returns associated with companies conducting stock buybacks and thus would want a quantitative measure for security screening.

We analyzed the consistency of buyback payouts for companies in the Morningstar US Market Index. Data shows that out of the 3,108 companies that have been constituents of the Morningstar US Market Index and have conducted buybacks at least once since the year 2000, 77% have bought back their shares for at least two consecutive years, while 59% have done so for three consecutive years.

Exhibit 6 Percentage of Companies With Consecutive Years of Buyback Payouts



Source: Morningstar.

Twenty-five companies conducted buybacks in each year from 2000 to 2022. Surprisingly, of the companies that have conducted at least one buyback since 2000 while never paying a dividend, 66% have conducted buybacks for at least two years and 43% for three years.

With a high percentage of companies conducting buybacks for at least two consecutive years, the buyback ratio/buyback yield is a reasonable metric for security selection in a buyback-oriented portfolio. Since many companies engaging in stock buybacks also pay out regular dividends, selecting stocks based on total shareholder yield, which is a combination of dividend yield and buyback yield/ratio, can be a good approach to constructing portfolios, providing exposure to both forms of capital redistribution. Looking at dividend yield and buyback ratios together, we can create composite scores by standardizing dividend and buyback yields, thereby allowing us to create portfolios with varying degrees of tilt to dividends and buyback payouts. Tilting portfolios in terms of shareholder payout, investors can express their preference on how much of the total payout dollars they would like to receive in cash (dividends) or capital gains (buybacks). Thus, an investor looking to capture the higher-yielding half of the total payout dollars of US Market Index companies can achieve it with a varying degree of dividend and buyback exposure.

Constructing Portfolios With Varying Degrees of Dividend and Buyback Tilt

We construct five different portfolios to assess the characteristics of varying degrees of exposure to dividends and buybacks. The portfolios are designed to provide exposure to U.S. companies that return capital to shareholders through either dividend payments or share buybacks. Each portfolio targets companies representing the higher-yielding half of total payout dollars from the parent benchmark based on adjusted shareholder yield¹⁵, which varies emphasis placed on dividend yield and net buyback yield while selecting securities. Net buyback yield is averaged over trailing eight quarters and accounts for new equity issuances by the company. Securities in the top 5% of the Morningstar US Market Index by total shareholder yield are removed from the selection universe to avoid potential yield traps. The five portfolios are:

- ▶ Pure dividend exposure: 100% weight to dividend yield
- ▶ Dividend tilt exposure: 75% weight to dividend yield and 25% weight to net buyback yield
- ▶ Shareholder payout exposure: 50% weight to both dividend and buyback yield
- ▶ Buyback tilt exposure: 25% weight to dividend yield and 75% weight to net buyback yield
- ▶ Pure buyback exposure: 0% weight to dividend yield and 100% weight to net buyback yield

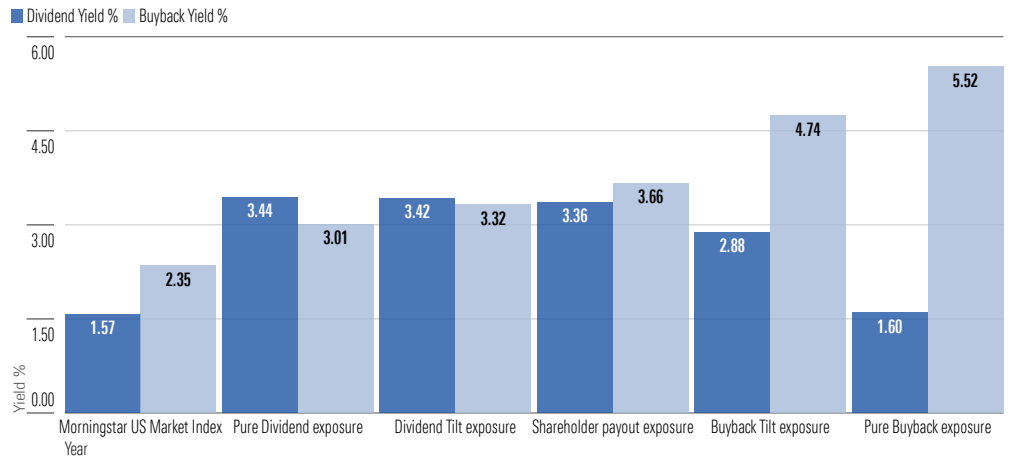
All portfolios are weighted by total shareholder payout dollars and are reconstituted (membership reset) annually, after the close of business on the third Friday in June.

Performance Characteristics Vary by Yield Type

In line with the portfolio objective, dividend yields as well as dividend contribution to total yield are highest for the pure dividend portfolio and lowest for the pure buyback portfolio.

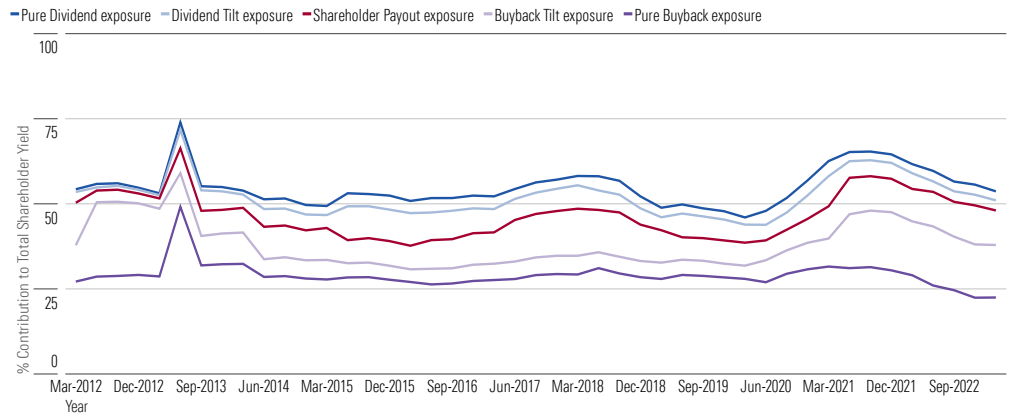
¹⁵ See Appendix 2 of "Morningstar US Dividend and Buyback Index" rulebook for a detailed definition of adjusted shareholder yield.

Exhibit 7 Dividend Yield Is Highest for Pure Dividend Portfolio, While Buyback Yield Is Highest for Pure Buyback Portfolio as of 20 March 2023



Source: Morningstar.

Exhibit 8 Dividend-Oriented Portfolios Have a Higher Dividend Contribution to Total Shareholder Yield



Source: Morningstar.

Companies reset their payout policy in relation to the nature of their cash flows, with defensive, less cyclical companies favoring dividend payouts. Buybacks, with their optionality, tend to be ideal for companies with volatile cash flows, and as such, the portfolios exhibit different performance characteristics. Moving across the spectrum from pure dividend portfolios to pure buyback portfolios, returns and volatility increase as we tilt from dividends toward buybacks. The variance in profitability metrics like ROA and net margin is highest for the pure buyback portfolio and lowest for the pure dividend portfolio.

Exhibit 9 Risk, Return, and Profitability Characteristics

| PORTFOLIO | NET RETURN | RISK | SHARPE RATIO | NET RETURN (10-YEAR) | NET RETURN (5-YEAR) | ROA VARIABILITY (5-YEAR) | NET MARGIN VARIABILITY (5-YEAR) |
|-----------------------------|------------|-------|--------------|----------------------|---------------------|--------------------------|---------------------------------|
| Morningstar US Market Index | 6.24 | 15.89 | 0.30 | 11.71 | 8.57 | 1.39% | 1.66% |
| Pure Dividend exposure | 8.90 | 14.82 | 0.50 | 11.14 | 8.61 | 1.10% | 2.15% |
| Dividend Tilt exposure | 9.03 | 14.91 | 0.51 | 11.27 | 8.94 | 1.23% | 2.23% |
| Shareholder Payout exposure | 9.50 | 15.22 | 0.53 | 12.19 | 10.99 | 1.22% | 2.30% |
| Buyback Tilt exposure | 10.05 | 15.24 | 0.56 | 13.37 | 12.64 | 1.16% | 2.21% |
| Pure buyback exposure | 10.11 | 15.73 | 0.55 | 13.42 | 11.57 | 1.95% | 2.83% |

Source: Morningstar.

Based on back-tested returns from June 2000 to March 2023.

10-year returns are from March 2013 to March 2023. Five-year returns are from March 2018 to March 2023.

To account for the differences in tax treatment for dividends versus buyback, where dividends are reinvested in the portfolio net of taxes, we present the net return across all the portfolios.

Splitting the performance into up months and down months, we observe that buyback-oriented portfolios, when compared with dividend-oriented portfolios, more frequently outperform the US Market Index during up months, while dividend-oriented portfolios more frequently outperform during down months. The pure buyback portfolio outperformed the Morningstar US Market Index during 51% of up months, while the pure dividend portfolio outperformed the Morningstar US Market Index during 70% of the down months.

Exhibit 10 Percentage of Months When the Portfolio Outperformed the Morningstar US Market Index and Average Monthly Excess Returns Over the Morningstar US Market Index

| PORTFOLIO | Percentage of outperformance months (Up Months) | Percentage of outperformance months (Down Months) | Average monthly excess returns (Up Months) | Average monthly excess returns (Down Months) |
|-----------------------------|---|---|--|--|
| Pure Dividend exposure | 34.68% | 69.70% | -0.40% | 1.24% |
| Dividend Tilt exposure | 34.68% | 68.69% | -0.37% | 1.23% |
| Shareholder Payout exposure | 40.46% | 67.68% | -0.30% | 1.21% |
| Buyback Tilt exposure | 41.62% | 67.68% | -0.20% | 1.17% |
| Pure Buyback exposure | 51.45% | 63.64% | 0.08% | 0.70% |

Source: Morningstar.

The pure dividend and dividend tilt portfolios generated 1.24% and 1.23% average excess returns, respectively, over the Morningstar US Market Index during down markets, which depicts the defensiveness of dividend-oriented portfolios.

This is seen in the up down capture ratio table as well. Buyback-skewed portfolios have a better upside capture ratio, while dividend-skewed portfolios show a lower downside capture ratio consistent with the rationale of dividend companies providing downside protection via sticky stream of cash dividends.

Exhibit 11 Upside Capture Ratio Is Better for Pure Buyback Portfolio and Downside Capture Ratio Is Better for Pure Dividend Portfolio

| PORTFOLIO | UPSIDE CAPTURE RATIO | DOWNSIDE CAPTURE RATIO |
|-----------------------------|----------------------|------------------------|
| Pure Dividend exposure | 0.87 | 0.71 |
| Dividend Tilt exposure | 0.87 | 0.71 |
| Shareholder Payout exposure | 0.90 | 0.71 |
| Buyback Tilt exposure | 0.93 | 0.72 |
| Pure Buyback exposure | 1.02 | 0.83 |

Source: Morningstar.

Historically, increased stock buyback activities have coincided with market peaks where valuations are running high. Buyback activities are more prevalent in growth/cyclical sectors like technology, consumer cyclical, and financial services, which, during down markets, get punished more than their defensive counterparts.

Looking at the returns for the pure dividend portfolio and the dividend tilt portfolio, the dividend tilt portfolio has performed slightly better during up markets. The buyback tilt portfolio, with relatively higher dividend exposure, does provide better downside protection as compared with the pure buyback portfolio, as seen in Exhibit 10. Comparing the holdings across portfolios, as of the June 22 reconstitution, the pure dividend portfolio would have missed securities like Lowe's and Cigna, which had relatively low dividend yields but returned significant amounts of cash via share repurchases (buyback yield of 8% and 6.67%, respectively).

Exhibit 12 Holdings Comparison as of June 2022 Reconstitution With Values as "-" for Securities Not Part of the Respective Portfolio

| Security | Dividend Yield | Buyback Yield | Portfolio Weights | | | | |
|-------------------------------|----------------|---------------|-------------------|---------------|--------------------|--------------|--------------|
| | | | Pure Dividend | Dividend Tilt | Shareholder Payout | Buyback Tilt | Pure Buyback |
| Apple Inc. | 0.60% | 3.29% | - | - | - | - | 14.07% |
| Alphabet Inc A | 0.00% | 3.07% | - | - | - | - | 3.29% |
| Berkshire Hathaway B | 0.00% | 3.77% | - | - | - | - | 3.41% |
| Exxon Mobil Corp | 3.66% | 0.29% | 2.52% | 2.51% | 2.52% | 2.52% | - |
| Visa Inc A | 0.68% | 2.61% | - | - | - | - | 1.81% |
| AbbVie Inc. | 3.68% | 0.53% | 1.72% | 1.71% | 1.72% | 1.72% | - |
| Verizon Communications Inc | 4.97% | 0.00% | 1.68% | 1.67% | 1.68% | 1.68% | - |
| Broadcom Inc | 2.65% | 1.60% | 1.60% | 1.59% | 1.60% | 1.60% | - |
| Philip Morris International | 4.66% | 0.30% | 1.28% | 1.28% | 1.28% | 1.28% | - |
| Honeywell Intl Inc | 2.00% | 0.11% | 0.86% | 0.85% | 0.86% | 0.86% | - |
| Intl Business Machines Corp | 4.73% | 0.26% | 0.98% | 0.97% | 0.98% | 0.98% | - |
| Lowe's Cos Inc | 1.64% | 8.00% | - | 1.98% | 1.99% | 1.99% | 1.99% |
| S&P Global Inc | 0.90% | 2.83% | - | - | - | - | 0.72% |
| American Tower Corp A | 2.10% | -1.01% | 0.20% | - | - | - | - |
| PayPal Holdings Inc. | 0.00% | 2.72% | - | - | - | - | 0.42% |
| Automatic Data Processing | 1.77% | 1.52% | 0.48% | - | - | - | - |
| BlackRock Inc | 2.58% | 1.76% | 0.65% | 0.65% | 0.65% | 0.65% | - |
| Starbucks Corp | 2.45% | 1.92% | 0.62% | 0.62% | 0.62% | 0.62% | - |
| Altria Group Inc | 6.58% | 1.14% | 1.20% | 1.19% | 1.20% | 1.20% | - |
| Mondelez International Inc | 2.15% | 2.00% | 0.58% | 0.57% | 0.58% | 0.58% | - |
| Cigna Corporation | 1.54% | 6.67% | - | 1.11% | 1.12% | 1.12% | 1.11% |
| Analog Devices Inc | 1.72% | 2.25% | 0.55% | - | - | 0.55% | 0.55% |
| 3M Co | 3.98% | 1.74% | 0.77% | 0.76% | 0.77% | 0.77% | - |
| Gilead Sciences Inc | 4.41% | 0.50% | 0.63% | 0.62% | 0.63% | 0.63% | - |
| CME Group Inc A | 1.86% | 0.00% | 0.21% | - | - | - | - |
| Southern Co | 3.52% | -0.08% | 0.43% | 0.43% | 0.43% | 0.43% | - |
| PNC Finl Services Group | 2.99% | 1.58% | 0.53% | 0.53% | 0.53% | 0.53% | - |
| Blackstone Inc. | 3.87% | 0.93% | 0.63% | 0.62% | 0.63% | 0.63% | - |
| Regeneron Pharmaceuticals Inc | 0.00% | 3.69% | - | - | - | - | 0.41% |
| Truist Financial Corp | 3.86% | 1.22% | 0.53% | 0.53% | 0.53% | 0.53% | - |

Source: Morningstar.

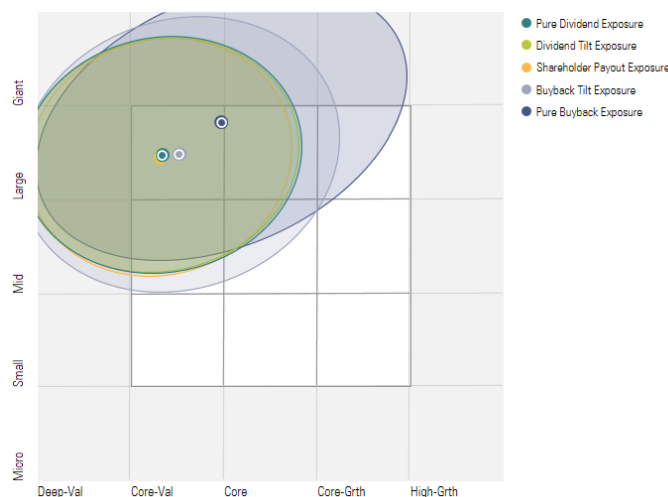
Similarly, companies like Exxon Mobil, AbbVie, Verizon Communications, Honeywell, and IBM, which all had significant dividend yields, are captured in the buyback tilt portfolio but not in the pure buyback portfolio.

For investors looking to retain some exposure to buybacks (dividends) while moving to a defensive (growth) strategy, the dividend (buyback) tilt portfolios provide the required balance.

Style Box, Sector Composition, and Payout Policy Composition

Looking at the portfolios via the Morningstar Style Box, each shows a value tilt, with the pure buyback portfolio showing more growth characteristics compared with its dividend-focused counterparts. All portfolios tilt toward large caps, which is consistent with the fact that companies returning capital to shareholders tend to be in the mature phase of their lifecycle.

Exhibit 13 Morningstar Style Box Plot as of 31 March 2023



Source: Morningstar Direct.

From a sector perspective, the dividend-focused portfolios, relative to their buyback-focused counterparts, have had higher exposure to defensive areas like consumer defensive, healthcare, energy, utilities, basic materials, and real estate over the past five years. Financial services has been the more represented sector for all the portfolios. This is because financials are the distributors of both dividends and buyback payouts. Exposure to the consumer cyclicals and technology sectors increases as we move toward buybacks. Buybacks have historically contributed 76% of total payout dollars for technology companies and 68% for consumer cyclicals.

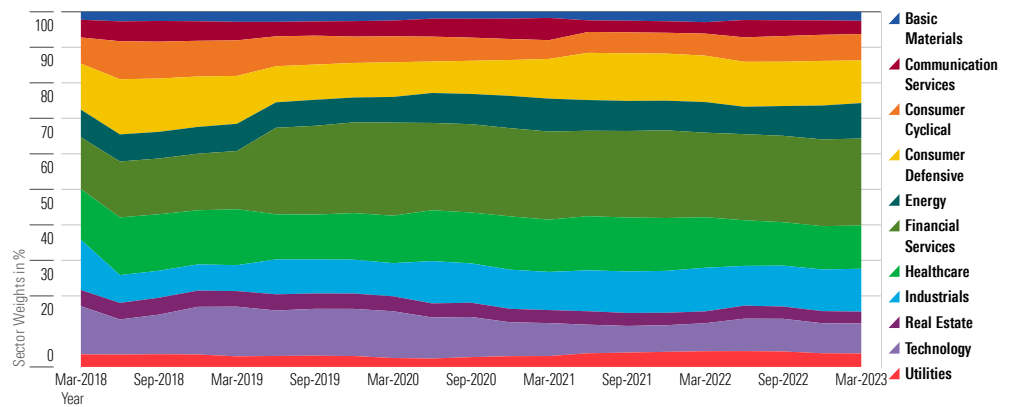
Exhibit 14 Average Active Sector Weights Over Morningstar US Market Index (2018-23)

| Sector | Morningstar US Market | Pure Dividend exposure | Dividend Tilt exposure | Shareholder payout exposure | Buyback Tilt exposure | Pure Buyback exposure |
|-------------|-----------------------|------------------------|------------------------|-----------------------------|-----------------------|-----------------------|
| Tech | 23.35% | -12.65% | -12.68% | -9.50% | -0.52% | 2.82% |
| Fin Svcs | 14.32% | 8.10% | 9.55% | 10.57% | 11.21% | 13.16% |
| Healthcare | 13.94% | 0.28% | -0.35% | -0.90% | -2.22% | -3.34% |
| Industrials | 9.65% | 0.81% | 0.71% | 0.66% | -0.37% | 0.21% |
| Cons Cyc | 11.75% | -4.26% | -3.51% | -2.14% | -1.05% | 0.72% |
| Comm Svcs | 7.36% | -2.73% | -3.05% | -2.67% | -2.87% | -2.92% |
| Cons Def | 6.68% | 5.38% | 4.96% | 2.60% | 0.45% | -2.19% |
| Energy | 3.87% | 4.22% | 4.22% | 3.83% | 1.01% | -1.83% |
| Utilities | 2.91% | 0.55% | 0.24% | -0.97% | -2.37% | -2.63% |
| Basic Mat. | 2.58% | -0.12% | -0.31% | -0.65% | -0.65% | -0.64% |
| Real Est | 3.59% | 0.43% | 0.22% | -0.79% | -2.56% | -3.35% |

Source: Morningstar.

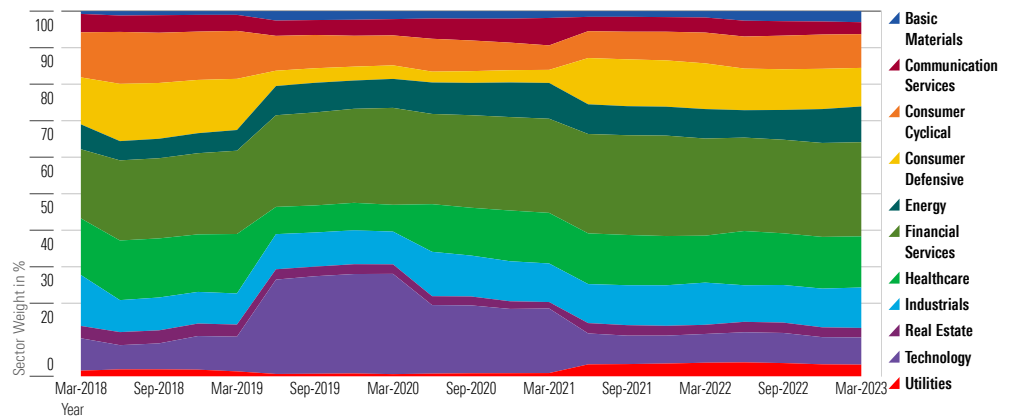
Different degrees of tilting within total payout leads to different as well as volatile sector weights. As seen in the following charts, the weight of financial services is highest and relatively stable for pure dividend portfolio, whereas for the pure buyback portfolio, the same shows a fall in 2019 and 2020, followed by a rise in 2021 and 2022. The cyclical nature of buyback payouts drives the sector weights within the portfolios, and this is reflected more in the buyback-tilted portfolios.

Exhibit 15a Recent Years Historical Sector Weights for Pure Dividend Exposure Portfolio



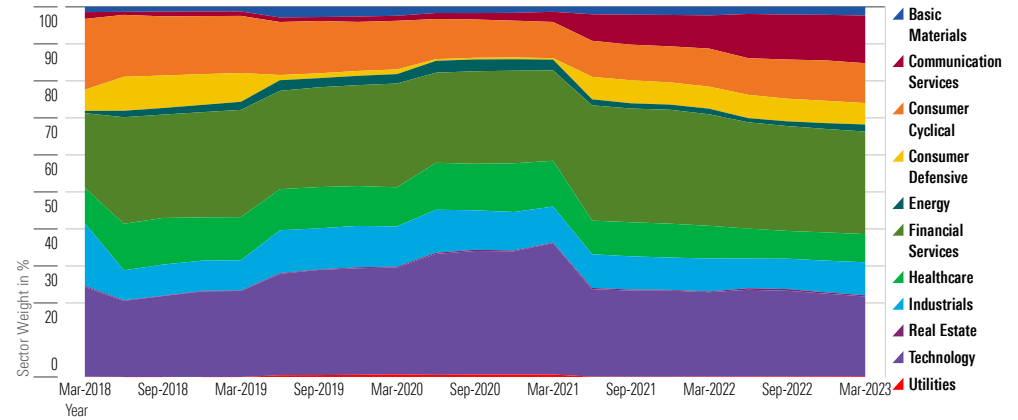
Source: Morningstar.

Exhibit 15b Recent Years Historical Sector Weights for Pure Dividend Exposure Portfolio



Source: Morningstar.

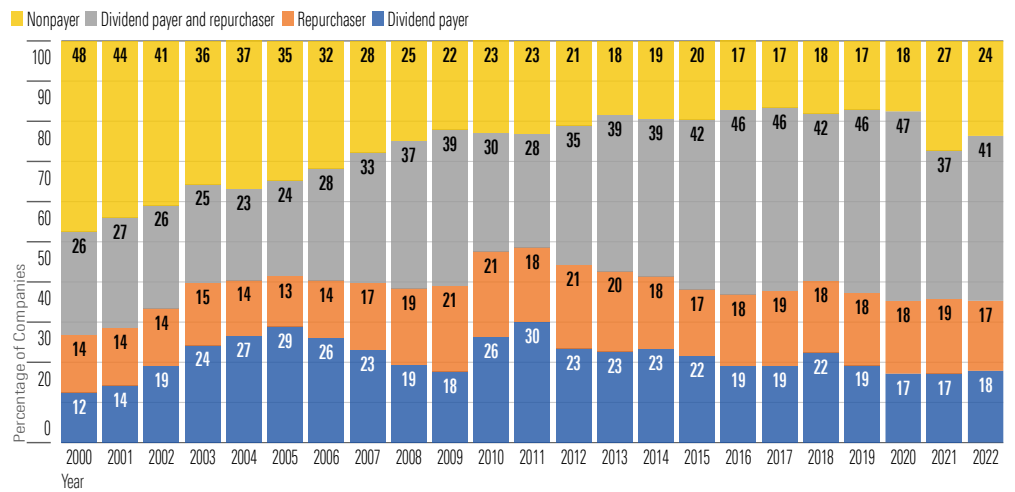
Exhibit 15c Recent Years Historical Sector Weights for Pure Dividend Exposure Portfolio



Source: Morningstar.

Lastly, we look at all portfolios through the payout policy lens, which classifies companies into four categories: (1) dividend paying, (2) repurchasing, (3) dividend paying and repurchasing, and (4) nonpaying. In line with Gullon and Ikenberry⁶, we define payout policy based on cash distribution by the company over a period of one year—for example, if a company paid out dividends and repurchased shares in the 12 months through the end of 2001, it would be classified as a dividend paying and repurchasing company for the year 2001. While analyzing the characteristics of companies within each category is outside of the scope of this paper, looking at the composition of the Morningstar US Market Index, one sees that the percentage of companies conducting both dividends and buybacks has gradually increased since 2000.

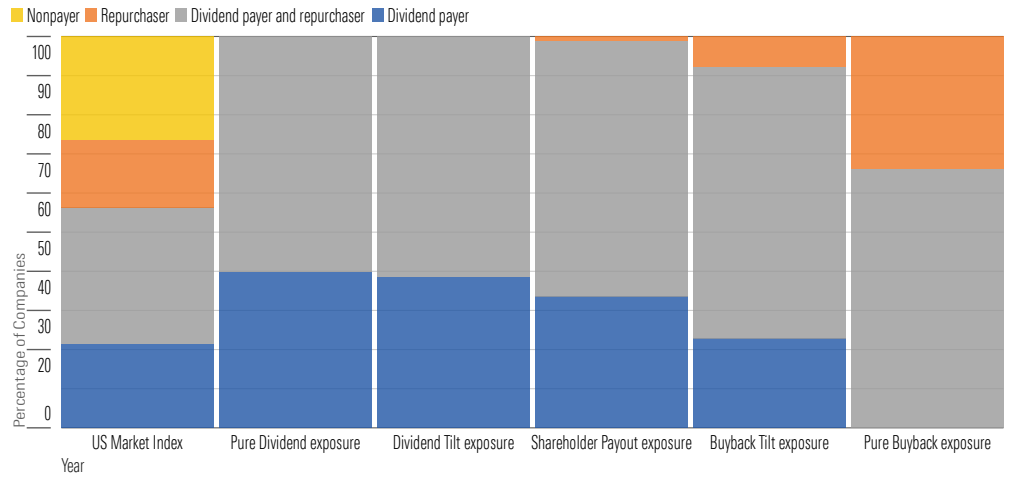
Exhibit 16 Historical Portfolio Composition Breakdown by Number of Companies (% of Total)



Source: Morningstar.

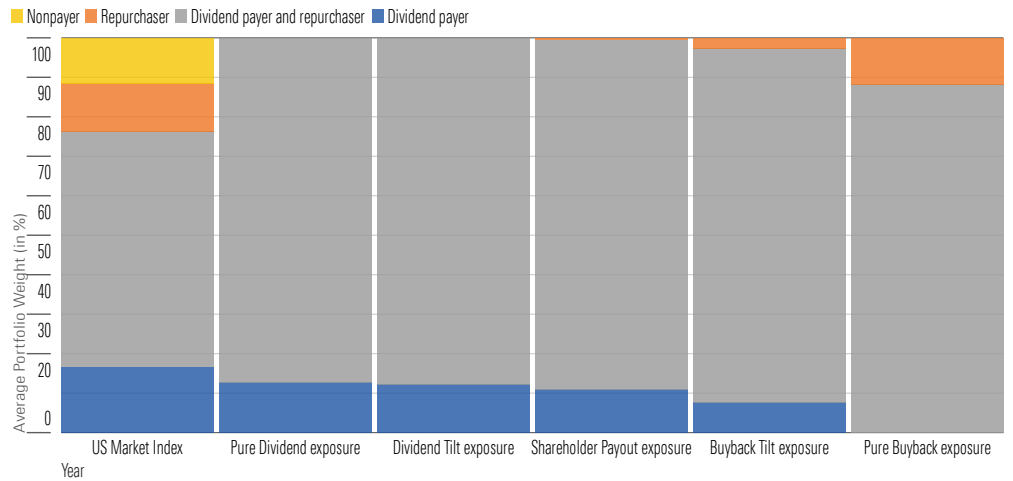
For our hypothetical portfolios, on average, as we move from pure dividend exposure toward pure buyback exposure portfolios, we see an increase in the share of number of repurchasing companies (companies that conducted only share repurchases) at the expense of only dividend-paying companies.

Exhibit 17 Number of Repurchasing Companies in Portfolio Increases With Buyback Tilt



Source: Morningstar.

Exhibit 18 Average Portfolio Weight by Payout Policy Category



Source: Morningstar.

Recent Performance

The three-month period ended March 31, 2023, saw the Morningstar US Market Index in positive territory. Portfolios with a buyback orientation have outperformed the US Market Index as well as their dividend-oriented counterparts. In 2022, on the other hand, the Morningstar US Market Index fell by 19.81%. The dividend-oriented portfolios outperformed the US Market Index as well as the buyback exposure portfolios in the down market. The shareholder payout portfolio provided better returns than both the pure dividend and pure buyback exposure portfolios during the 2022 market decline. If 2022 is

evidence, marked by the poor performance of pure buyback portfolio, having some exposure to dividends provides a downside cushion to the portfolio.

Exhibit 19 Average Portfolio Weight by Payout Policy Category

| Net Return | Morningstar US Market Index | Pure Dividend exposure | Dividend Tilt exposure | Shareholder Payout exposure | Buyback Tilt exposure | Pure Buyback exposure |
|------------|-----------------------------|------------------------|------------------------|-----------------------------|-----------------------|-----------------------|
| 3-Month | 7.26 | -1.62 | -2.11 | -1.99 | 3.07 | 8.66 |
| 6-Month | 14.90 | 12.61 | 12.07 | 12.79 | 17.27 | 18.19 |
| 2022 | -19.81 | -1.65 | -1.99 | -0.99 | -4.20 | -13.69 |
| 2021 | 25.28 | 30.01 | 30.96 | 32.54 | 33.63 | 33.45 |

Source: Morningstar.

Summarizing the Trade-Offs—Dividends vs. Buybacks

Given their exposure to cyclical sectors, buyback-tilted portfolios have historically outperformed their dividend counterparts during up months for the equity market. They also come with increased portfolio risk when compared with their dividend-focused counterparts. Dividend-oriented portfolios have demonstrated steady exposure to defensive sectors along with downside protection characteristics during down months. Tilting by total shareholder yield thus allows investors to choose between a defensive sectoral bias with a preference for a steady stream of cash income (dividend tilt) and cyclical sector bias with a preference of capital gains (buyback tilt).

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