

APRIL 2025



# 2025 Fortuna Advisors Buyback ROI Report

The \$4.1 Trillion Question: Do Buybacks Create Value?





## TABLE OF CONTENTS

Why Measure Buyback ROI?	3
Repurchases Surge to a New Record High	4
Trends in Capital Deployment	6
Buyback ROI and Buyback Effectiveness Rebounded in 2024	8
Top Ten: Buyback ROI and Buyback Effectiveness	9
Buyback ROI by Sector	12
The Important Role of Buybacks	15
Concluding Remarks	18
Value Inspired Buyback Execution	19
2025 Fortuna Advisors Buyback ROI Ranking	20

### ABOUT FORTUNA ADVISORS

Fortuna Advisors collaborates with leaders to transform decision-making throughout their business to achieve exceptional results. Our management playbook delivers measurable outcomes through:

1. **Better Insights:** See the truth about where value is created or destroyed.
2. **Better Decisions:** Drive faster, better and enduring results.
3. **Better Behaviors:** Align incentives and processes to drive execution.

We serve as a catalyst to create a culture of ownership, where everyone from the board to management and employees embraces a long-term investor perspective to unlock the organization's full value creation potential.

### CONTACT US

Email: [info@fortuna-advisors.com](mailto:info@fortuna-advisors.com)

Tel: 631-478-5670

[www.fortuna-advisors.com](http://www.fortuna-advisors.com)



# Why Measure Buyback ROI?

These days, nearly everyone has an opinion on buybacks. From many investors' perspectives, these distributions drive up share prices, offer a tax-efficient vehicle to return capital to selling shareholders, and are instrumental in offsetting dilution from stock option awards. On the other side of the aisle, many claim share repurchases lead to long-term underinvestment, artificially inflate EPS to boost executive payouts, and put pressure on companies to underpay their workers.

While there are elements of truth to most, if not all, of these claims, we think the pundits and media are missing the more important question. Over the last five years, S&P 500 companies devoted \$4.1 trillion to share repurchases—just short of the \$4.2 trillion they spent on capital expenditures. So do these massive outlays of capital actually create value for managements and the shareholders they act on behalf of? The purpose of the report is to answer this question by calculating the returns associated with individual S&P 500 Buyback programs.

The condition for creating value from buybacks is relatively simple, as Warren Buffet explains in Berkshire Hathaway's 2022 Letter to Shareholders:

"The math isn't complicated: When the share count goes down, your interest in our many businesses goes up. Every small bit helps **if** repurchases are made at value-accretive prices. **Just as surely, when a company overpays for repurchases, the continuing shareholders lose. At such times, gains flow only to the selling shareholders and to the friendly, but expensive, investment banker who recommended the foolish purchases.**"

Buffett and Berkshire Hathaway's judicious approach to repurchases is fundamental to our mission to help companies achieve higher total shareholder return (TSR) by developing better ways to measure and motivate success and effective capital deployment. To this end, in 2011 we developed "Buyback ROI" to compare share repurchases to other capital uses, such as capital

expenditures and acquisitions.

It is a straightforward concept: when a company repurchases shares and its subsequent TSR is positive, it produces positive Buyback ROI. In other words, the company has earned a return on its investment in its own shares by retiring them before the market capitalization increase, which is concentrated in fewer shares.

When management achieves a Buyback ROI that exceeds the company's TSR, we refer to this as "Buyback Effectiveness." Achieving positive Buyback Effectiveness requires buying back more when your share price is below its long-term trendline, which results in repurchasing more shares per dollar of buybacks. In four out of our last five Buyback ROI reports, this timing factor has been negative, implying substantial opportunity costs and value left on the table for remaining shareholders in companies that repurchase stock.

Improving Buyback ROI and Buyback Effectiveness should be the goal of every share repurchase program. Indeed, management teams that achieve strong results in these metrics can be said to have demonstrated good stewardship of investor capital, and are not just providing an artificial boost to EPS performance by reducing the share count.

For over a decade, Fortuna Advisors has advocated for a proactive, value-based approach to share buybacks. Since our introduction of Buyback ROI in a 2011 study, we have published our Buyback ROI ranking for the S&P 500's largest share repurchasers. The purpose of our Buyback ROI Reports has been threefold: (1) to show the staggering amounts of capital that have been deployed in repurchases; (2) to demonstrate how strategic repurchase programs can create value; and (3) to publish a comprehensive ranking of every substantial S&P 500 buyback program over the last five years.

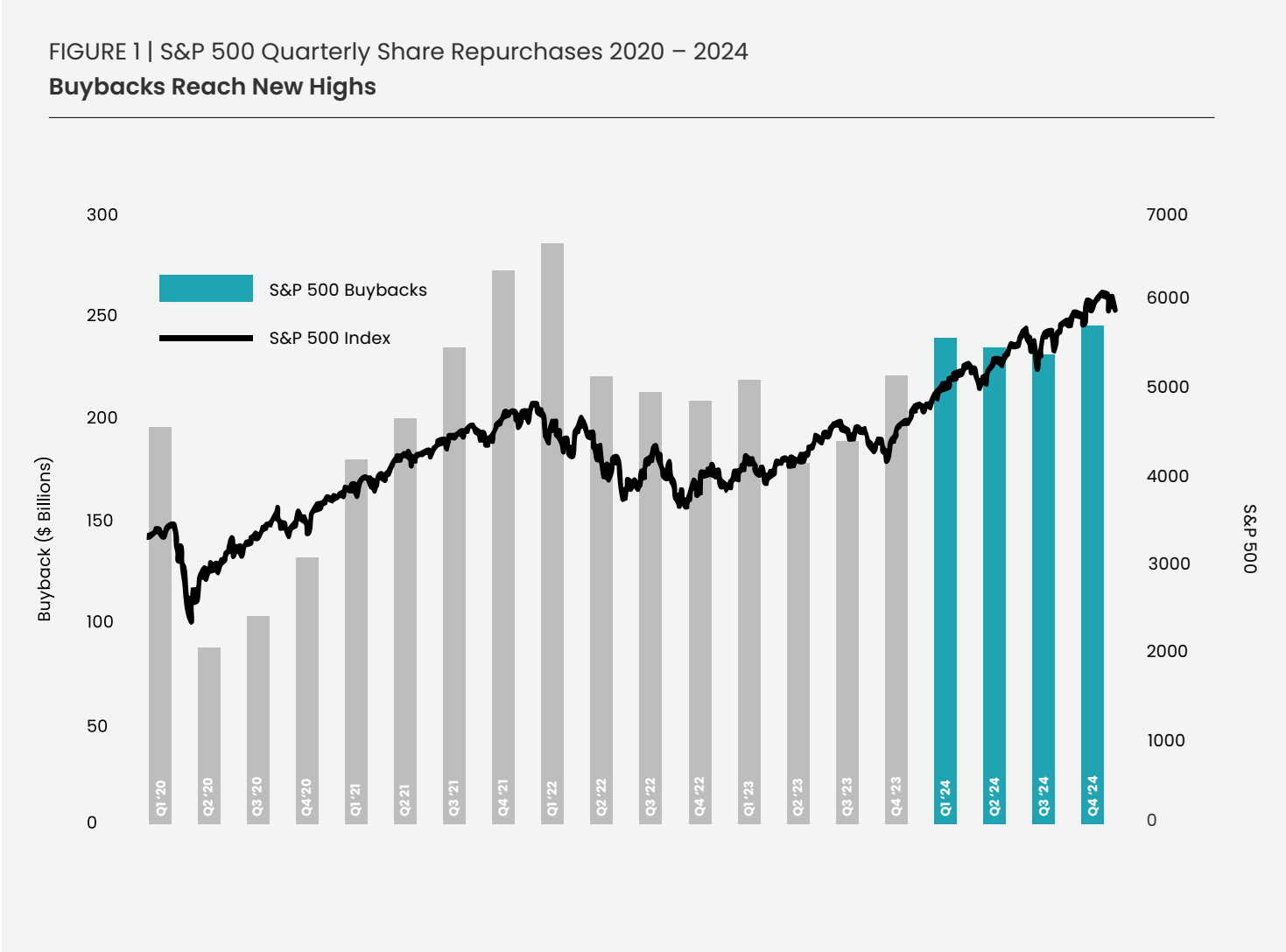
# Repurchases Surge to a New Record High

After a 13% decrease in 2023, S&P 500 buyback volume swelled 16% to \$935 billion in 2024, breaking the previous record from 2022. S&P 500<sup>1</sup> companies repurchased stock steadily throughout 2024, with volume peaking at \$243 billion in Q4, which coincided with an all-time high for the index itself. Quarterly buyback volume has exceeded this level only twice, in Q4 of 2021 and Q1 of 2022, periods

which also coincided with the previous high for the S&P 500 index following the 2021 bull run. In [Figure 1](#), we track buyback volume vs the S&P 500 index, which shows that companies tend to repurchase more stock when share prices are relatively higher. This makes sense to a degree, since high markets typically means strong economic

activity and higher cash levels, which fuel repurchases and other shareholder distributions. But it also means companies are buying at share prices that are relatively high, presenting steep opportunity costs for the capital deployed to buybacks.

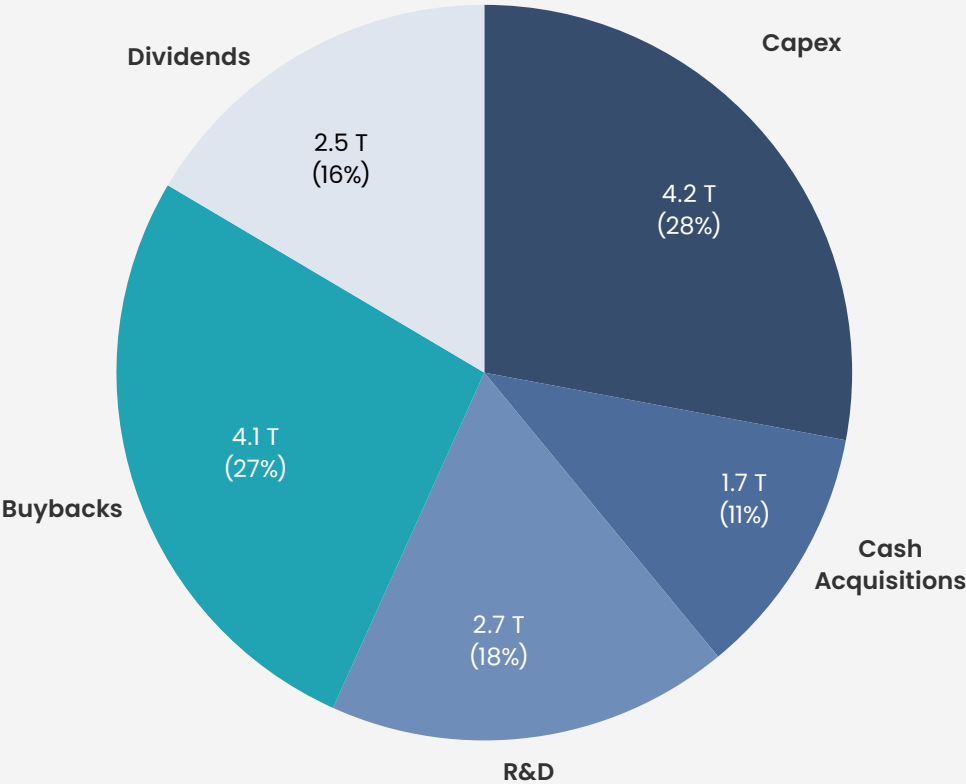
FIGURE 1 | S&P 500 Quarterly Share Repurchases 2020 – 2024  
**Buybacks Reach New Highs**



<sup>1</sup>References to S&P 500 reflect the index as constituted on December 31, 2024.

Figure 2 shows the distribution of S&P 500 capital allocation across the last five years. Since 2020, buyback spending was second only to capex, and only marginally so. During this period, S&P 500 companies spent \$4.2 trillion on capex (28% of total capital deployed) versus \$4.1 trillion in stock repurchases (27% of total capital deployed), which highlights the staggering amount of capital distributed back to investors through buybacks in modern capital markets.

FIGURE 2 | S&P 500 Capital Deployment Share: 2020 – 2024  
Buybacks Rival Capex Spend since 2020



# Trends in Capital Deployment

While buybacks showed the biggest percentage increase in 2024, capital expenditure (capex) also rose substantially, by 12%, breaching \$1 trillion for the first time. Indeed, capex grew 61% cumulatively over the last five years. This increasing capital spend was fueled by many factors, including the nearshoring of supply chains after the COVID pandemic and the more recent boom in AI-related data centers and infrastructure in recent years. Other contributing factors included higher domestic energy production as well as the rapid scaling of manufacturing facilities to produce weight loss drugs.

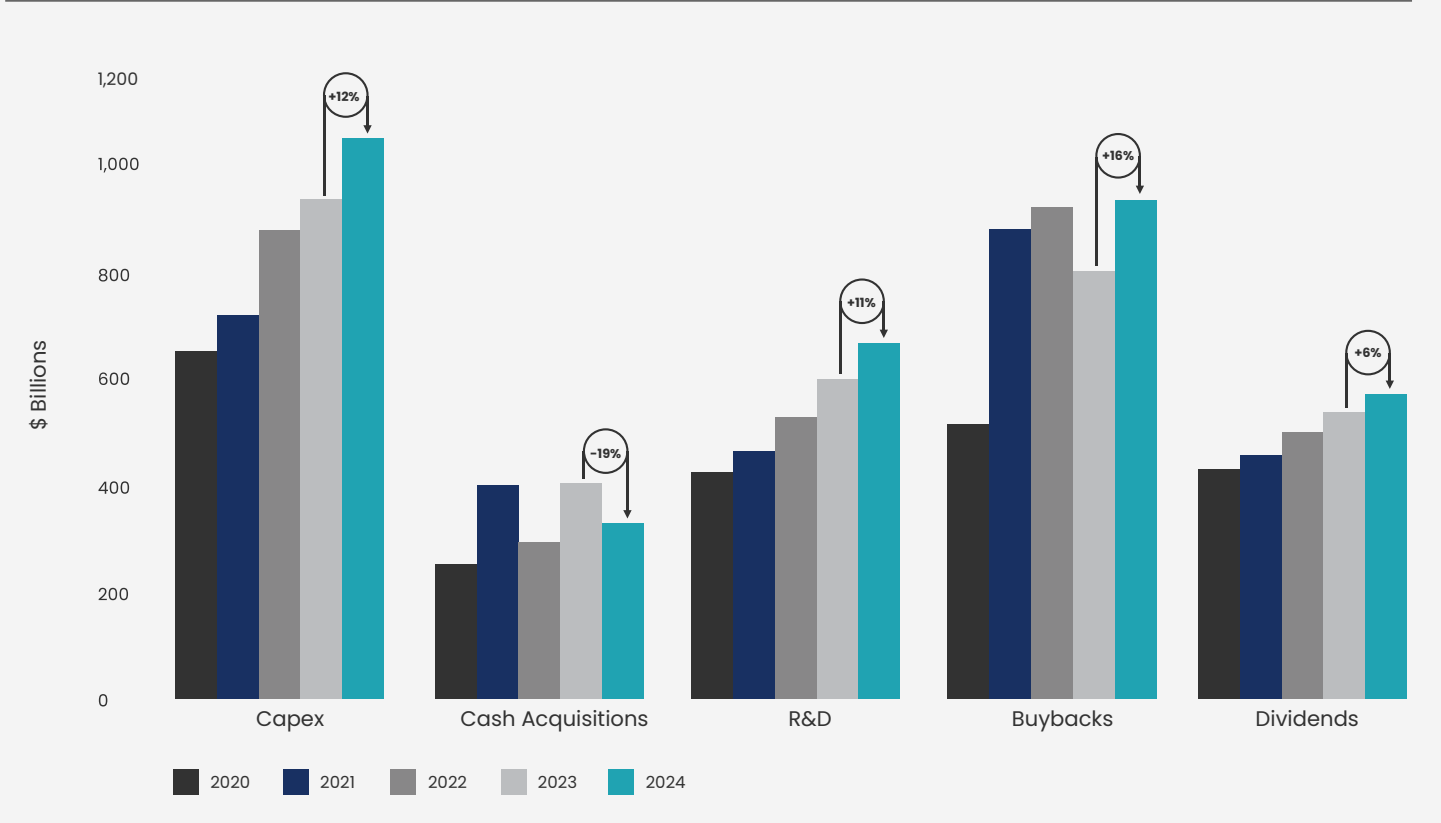
At the same time, companies scaled back on cash M&A, devoting 19% less cash to acquisitions in 2024, for a total of \$328 billion, despite reported higher deal volume and value compared to 2023. Managements may have been more inclined to use their stock to complete deals, given rising share prices and valuations in 2024. Much of the uptick in deal volume can also be attributed to private equity and private companies, which would not have been captured in our sample of S&P 500 companies.

R&D spending grew 11% in 2024, which marks a deceleration from the previous two years and falls just

below the average for the last five years. While it’s difficult to draw any clear conclusions from this mild deceleration, it could signal that AI enthusiasm has leveled off heading into 2025.

Dividends also continued their slow but steady growth trajectory, growing 6% in 2024. While buybacks tend to fluctuate with the market, as shown in [Figure 1](#), Dividends tend to be much more stable and predictable, as shown by their stair-step pattern in [Figure 3](#).

FIGURE 3 | Capital Deployment Trends: 2020 – 2024  
Buybacks and Capex Increase as Cash M&A Slides



# Fortuna Buyback Metrics Explained

Fortuna Advisors developed Buyback ROI and Buyback Effectiveness to enable comparison of a company’s share repurchase activity to its other uses of capital. In general terms, when the value of an acquired asset increases, we say it has earned a positive return on investment. Our thinking behind buybacks is similar—when the implied value of a company’s repurchased shares increases over a period, it has earned a positive Buyback ROI.

**Buyback ROI** is calculated as an annualized internal rate of return (IRR) that accounts for: (1) the cash outflows associated with share repurchases; (2) the estimated cash “inflows” of dividends “avoided”; and (3) an estimated final “inflow” related to the final value of the accumulated shares repurchased.

If a company’s share price starts the year at \$100, pays a dividend of \$1 at the end of each quarter and has a year-end share price of \$110, it would have an initial outflow of \$101 (factoring a 1% excise tax), \$4 of quarterly “inflows,” and a final “inflow” of \$110 at the end of the year—resulting in a Buyback ROI of 13.1%, as shown in [Figure 4](#).

While it is easier to achieve a positive Buyback ROI when a company’s TSR is generally increasing, it can also be achieved through effective timing of repurchases.

**Buyback Effectiveness** measures the value attributable to optimizing the timing of repurchases. It is calculated as the compound difference

FIGURE 4  
Calculation of Buyback ROI

	Time 0	Q1	Q2	Q3	Q4
Buyback	\$100.00				
Tax	\$1.00				
Dividends		\$1.00	\$1.00	\$1.00	\$1.00
Ending Price					\$110.00
Cash Flows	-\$101.00	\$1.00	\$1.00	\$1.00	\$111.00
Annualized IRR = Buyback ROI					13.1%

between Buyback ROI and the company’s TSR, as shown in [Figure 5](#). When Buyback ROI exceeds TSR, a company has executed buybacks when its stock was priced below the long-term trend, on average. When Buyback ROI trails TSR, a company has executed buybacks above this long-term price trend.

If the company had 16% TSR while generating the 13.1% Buyback ROI described above, it would mean it had negative Buyback Effectiveness due to poor timing.

Alternatively, if it had 12% TSR with 13.1% Buyback ROI, it would have benefitted from good timing on its buybacks and positive Buyback Effectiveness.

To improve Buyback Effectiveness, companies should have a [real-time perspective](#) on their intrinsic value per share and how that compares to market price per share—they are rarely the same. With the right toolkit and metrics, company Treasurers can build confidence on the best times to execute buybacks.

FIGURE 5  
Calculation of Buyback Effectiveness

Buyback Effectiveness

=

(1 + Buyback ROI)

- 1

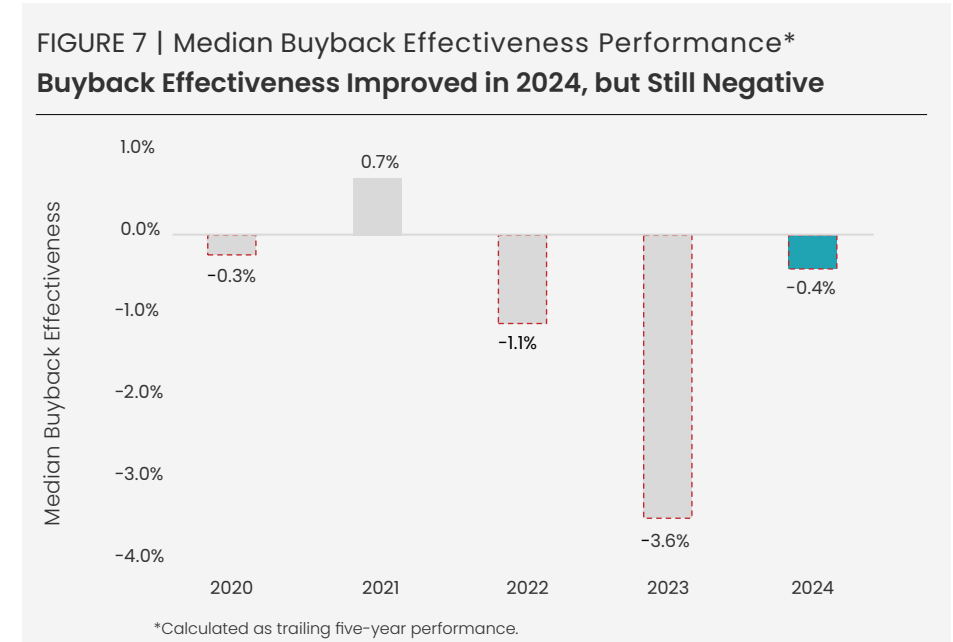
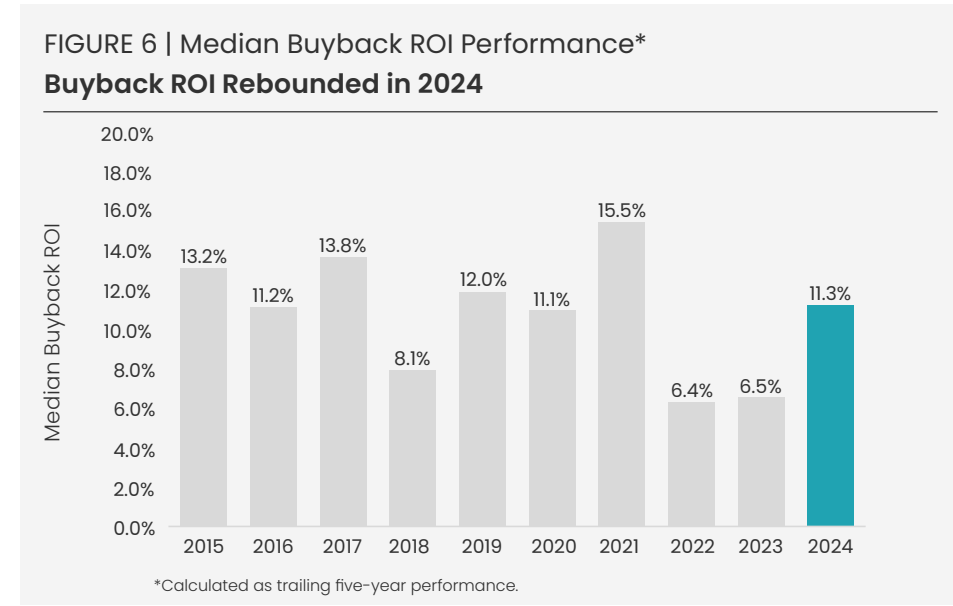
(1+ TSR)

# Buyback ROI and Buyback Effectiveness Rebounded in 2024

After two consecutive dismal years for Buyback ROI, 2024’s sharply rising market offered some respite for the measure, which increased to 11.3%. [Figure 6](#) shows the trailing five-year median Buyback ROI for S&P 500 companies in our study over the last ten years. While 27% of our S&P 500 sample<sup>1</sup> achieved a negative Buyback ROI in the 2023 report, in the 2024 report this figure shrunk to 22%.

While the discussion so far has focused on TSR, the other determinant of Buyback ROI is the timing of share repurchases, which we capture in Buyback Effectiveness. Historically, most companies tend to overlook the importance of timing and relative valuation when planning repurchases. As mentioned earlier, many make the decision to buy back shares based on excess cash rather than determining whether executing at the current share price is likely to be value-accretive or dilutive for shareholders. As a result, in all but one of the last five median reports, Buyback Effectiveness has been negative.

In last year’s report, there was a precipitous drop to -3.6%, well below the historical average, with 76% of our sample of S&P 500 companies yielding negative Buyback Effectiveness. Over the latest five-year period ending in 2024, this timing factor improved to -0.4% for the median company, with 60% having negative Buyback Effectiveness. While this shows improvement, it’s still concerning



that a majority of S&P repurchasers have a negative timing impact.

While there are many [methodologies](#) that can be applied to strategic timing of repurchases, consider the following to illustrate the immense value at stake. In a scenario where buybacks for S&P 500 companies were redistributed so that the

same amount was repurchased each quarter, 73% would have retired more shares. The average company would have been able to repurchase an additional 4.0% more shares, worth an additional \$369 million at the end of the five-year period. On aggregate, these shares would have been worth an additional \$180 billion as of the end of 2024.

<sup>1</sup>Sample includes the 370 largest S&P 500 share repurchasers. We omit companies with less than \$1 billion or 4% of their market capitalization in repurchases.



# Top Ten: Buyback ROI and Buyback Effectiveness

Despite the mixed results for S&P 500 repurchasers as a group, there were many companies that created value for their shareholders through their buyback programs. [Figure 8](#) lists the top ten companies in Buyback ROI over the last five years.

FIGURE 8 | Buyback ROI: 2020 – 2024  
Top 10 Buyback ROI Companies

Rank	Company	Buybacks (\$ millions)	Buyback ROI	TSR*	Buyback Effectiveness
1	Vistra Corp.	4,931	115.0%	43.8%	49.5%
2	NVIDIA Corporation	67,312	114.2%	92.8%	11.1%
3	Targa Resources Corp.	1,652	70.5%	39.3%	22.3%
4	General Electric Company	8,215	65.0%	28.7%	28.2%
5	Broadcom Inc.	32,463	64.3%	47.8%	11.2%
6	Fair Isaac Corporation	4,115	63.7%	44.7%	13.1%
7	Arista Networks, Inc.	2,163	59.3%	50.9%	5.6%
8	Howmet Aerospace Inc.	1,801	55.3%	37.8%	12.8%
9	Netflix, Inc.	13,142	52.1%	22.7%	24.0%
10	Deckers Outdoor Corporation	1,536	51.4%	46.8%	3.1%
Median of Top 10		4,523	64.0%	44.3%	13.0%
Median of All Ranked Companies		4,388	11.3%	10.5%	-1.0%

\*Note: TSR measured as the starting and ending average quarterly share price.

Vistra Corp., a Texas-based utilities company, was the top performer in this year’s report in both Buyback ROI and Buyback Effectiveness. As a retail electricity and power generation company, Vistra benefited tremendously from the growing energy demand created by AI data centers and infrastructure in 2023 and 2024. Vistra’s strong buyback performance over the last five years was fueled by concentrated share repurchases in 2022, including \$710 million in Q1 2022, which appreciated handsomely

as their share price took off in 2023 and 2024. Vistra’s performance was notably driven by its strong Buyback Effectiveness, which propelled its Buyback ROI to 115.0%, a return more than double its annualized TSR of 43.8%!

NVIDIA was a close second with a Buyback ROI of 114.2%. Unlike Vistra, NVIDIA’s performance was largely fueled by an impressive annualized TSR<sup>2</sup> of 92.8% from 2020 – 2024, with a relatively marginal contribution Buyback Effectiveness. While these top two performers exemplify

different ways to achieve strong Buyback ROI, it’s notable that all of the top ten exhibit positive Buyback Effectiveness, emphasizing the importance of good timing to get the most out of your buyback program.

Notably, our top ten list comprises a wide range of sectors, but there is a tilt towards Information Technology (NVIDIA, Broadcom, Fair Isaac, and Arista Networks) given the sector’s strong TSR over the last five years.

FIGURE 9 | Buyback Effectiveness: 2020 – 2024

**Top 10 Buyback Effectiveness Companies**

Rank	Company	Buybacks (\$ millions)	Buyback ROI	TSR*	Buyback Effectiveness
1	Vistra Corp.	4,931	115.0%	43.8%	49.5%
2	Incyte Corporation	2,153	34.7%	-3.6%	39.6%
3	General Motors Company	20,679	44.4%	8.5%	33.1%
4	General Electric Company	8,215	65.0%	28.7%	28.2%
5	Netflix, Inc.	13,142	52.1%	22.7%	24.0%
6	Targa Resources Corp.	1,652	70.5%	39.3%	22.3%
7	Salesforce, Inc.	19,449	38.9%	15.4%	20.4%
8	Las Vegas Sands Corp.	2,263	16.7%	-2.6%	19.8%
9	NRG Energy, Inc.	3,040	46.9%	22.6%	19.8%
10	Booking Holdings Inc.	24,973	40.5%	19.8%	17.3%
<b>Median of Top 10</b>		6,573	45.6%	21.2%	23.2%
<b>Median of All Ranked Companies</b>		4,388	11.3%	10.5%	-1.0%

\*Note: TSR measured as the starting and ending average quarterly share price.

Similar to Vistra, Incyte Corporation demonstrates how Buyback Effectiveness can provide strong ROI—even for companies with negative TSR. Despite a -3.6% annualized TSR over the period, Incyte leveraged

good timing to produce positive Buyback ROI of 34.7%, which puts it in the 85th percentile and 31st overall in our S&P 500 ranking.

Other standouts include General Motors, Booking Holdings, and

Salesforce, which seemed to pay particular attention to the timing of their repurchases.

# Case Study: Salesforce's Strong Buyback Timing

FIGURE 10  
Salesforce's Buyback Effectiveness

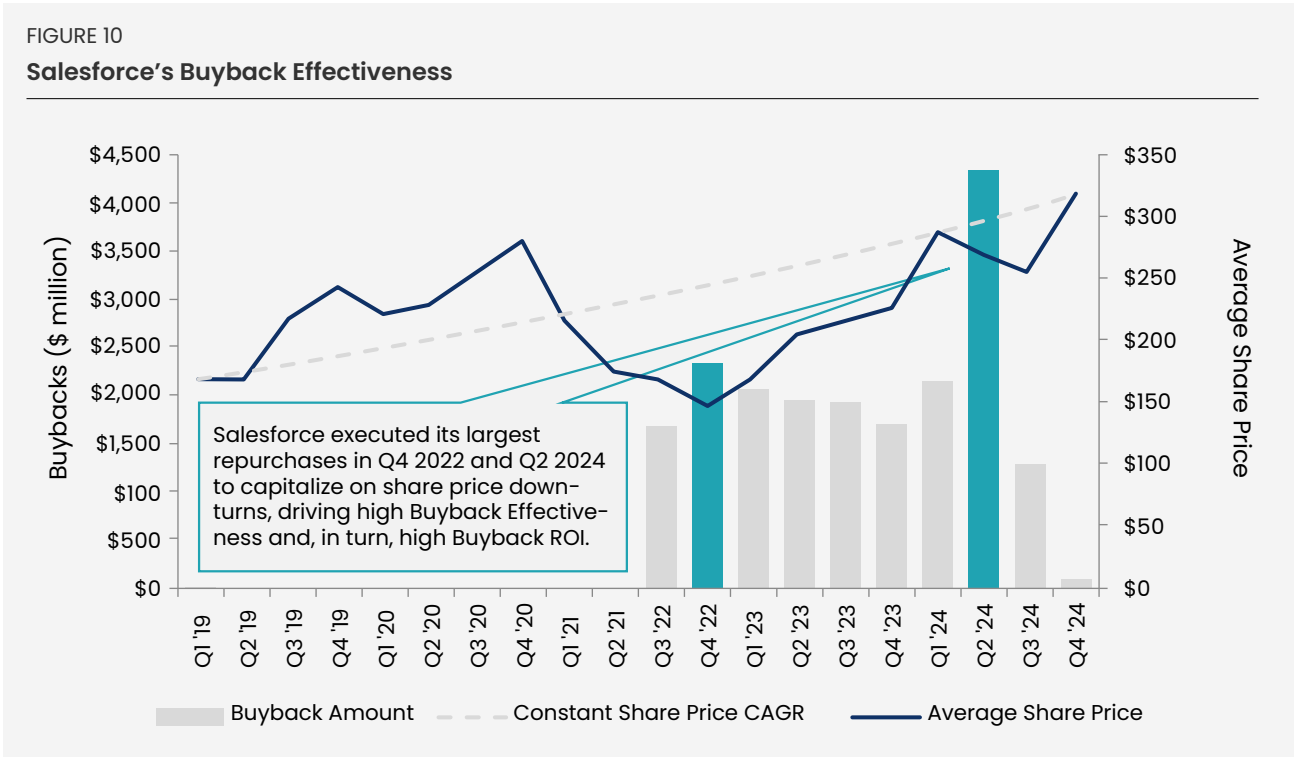


Figure 10 shows Salesforce's quarterly buybacks overlaid on their average share price and constant share price appreciation trendlines. Note the large volume of shares repurchased in Q4 of 2022 Q2 of 2024, which accounted for more than a third of their total buybacks over the last five years. In these periods

the company's average share price was below the share price appreciation trendline, and even further below their 2024 ending share price, creating an attractive opportunity to buy back shares.

This repurchasing pattern helped Salesforce place

seventh in Buyback Effectiveness at 20.4%, leveraging their Buyback ROI up to 38.9%, despite TSR of only 15.4%. Salesforce management skillfully capitalized on volatility in their share price by buying back shares at relative lows, ultimately delivering substantial value added for its shareholders.



## Buyback ROI by Sector

Industrials and Financials were the top-performing sectors with 15.3% and 14.4% Buyback ROI, respectively. Notably, these two sectors also benefited from positive Buyback Effectiveness. As cyclical industries, they were particularly exposed to share price volatility, which enabled them to increase their Buyback Effectiveness and thus ROI.

Industrials was also buoyed by strong TSR, particularly in recent years, as a boom in Capital Goods was ignited by high business and consumer confidence. In the wake of the COVID recovery, US companies aggressively built homes, factories, and data centers, among other capital-intensive investments. Just as notable was the strong performance of Aerospace and Defense companies following heightened geopolitical tension and renewed space exploration ambitions.

Financials was second in both Buyback ROI and Buyback Effectiveness, suggesting the sector as a whole may have been paying more attention than others to the implications of buyback timing. Perhaps they too read Buffett and Munger's 2023 comments on buybacks and took their philosophy to heart. Financials also notably had the second-most buyback volume

by sector with \$787 billion in repurchases.

Information Technology stood out in two ways. It had the highest total buybacks—as the only sector to exceed \$1 trillion in repurchase volume—and had the highest annualized TSR at 16.8%. Unfortunately, with so many of its buybacks concentrated around share price highs in 2021, the sector suffers from poor Buyback Effectiveness of -2.8%. The combination of high buybacks and poor timing makes the tech industry a prime target for activists and other investors who would benefit from a more judicious approach to share repurchases.

Utilities was also a standout by virtue of its low TSR combined with the highest Buyback Effectiveness of any sector, which propelled it to fifth place on overall Buyback ROI. Part of this result stems from Utilities' TSR underperformance in 2020 – 2023 versus the rest of the market, and stark outperformance in 2024. But it also results from the sectors' opportunist concentration of repurchases in downturns, when others became more conservative with repurchases. In fact, Utilities highest buyback volume over the last five years came in Q3 of 2020, which was the second lowest quarter by

volume for every other sector combined. As with Vistra Corp., the sector as a whole demonstrates how good timing can offset lackluster TSR.

The Energy sector experienced substantial whiplash, dropping all the way from the top sector spot in last year's report and the only sector to have positive Buyback Effectiveness, to the 8th spot with the second-worst Buyback Effectiveness. This precipitous decline was fueled largely by falling oil prices, which approached a four-year low at the end of 2024.

Real Estate bears two unfortunate distinctions in this report. It was the only sector with median negative Buyback ROI, and it had the worst Buyback Effectiveness at -6.2%. As a historically stable sector, Real Estate tends to struggle with Buyback Effectiveness. But the fact that it had the lowest TSR of the group also didn't do the sector any favors.

FIGURE 11 | Buyback ROI by Sector: 2020 – 2024

**Industrials and Financials on Top**

Rank	Sector	Aggregate Buybacks (\$ millions)	Median		
			Buyback ROI	TSR	Buyback Effectiveness
1	Industrials	315,699	15.3%	13.8%	0.8%
2	Financials	786,684	14.4%	13.3%	2.0%
3	Information Technology	1,098,832	14.1%	16.8%	-2.8%
4	Consumer Discretionary	337,597	13.9%	11.2%	-1.3%
5	Utilities	13,516	12.3%	7.1%	4.9%
6	Materials	90,036	8.1%	10.0%	-5.1%
7	Communication Services	595,586	7.7%	8.7%	0.7%
8	Energy	203,725	7.2%	14.2%	-5.6%
9	Health Care	374,218	3.1%	9.4%	-4.7%
10	Consumer Staples	189,390	0.9%	6.3%	-3.9%
11	Real Estate	7,191	-1.2%	5.4%	-6.2%

\*Note: TSR measured as the starting and ending average quarterly share price.

\*\*Note: Medians affect the relationship of Buyback ROI, TSR, and Buyback Effectiveness.

To put some familiar names to this sector ranking, we also include [Figure 12](#), which lists the top three Buyback ROI companies in each sector, along with their Buyback ROI results.

FIGURE 12 | Buyback ROI 2020 – 2024

**Top Buyback ROI Companies by Sector****#1 in Sector**

Sector	Company	Buyback ROI
Industrials	General Electric Company	65.0%
Financials	Apollo Global Management, Inc.	49.0%
Information Technology	NVIDIA Corporation	114.2%
Consumer Discretionary	Deckers Outdoor Corporation	51.4%
Utilities	Vistra Corp.	115.0%
Materials	Packaging Corporation of America	31.9%
Communication Services	Netflix, Inc.	52.1%
Energy	Targa Resources Corp.	70.5%
Health Care	Eli Lilly and Company	51.3%
Consumer Staples	Costco Wholesale Corporation	31.5%
Real Estate	CBRE Group, Inc.	22.2%

**#2 in Sector**

Sector	Company	Buyback ROI
Industrials	Howmet Aerospace Inc.	55.3%
Financials	KKR & Co. Inc.	42.9%
Information Technology	Broadcom Inc.	64.3%
Consumer Discretionary	General Motors Company	44.4%
Utilities	NRG Energy, Inc.	46.9%
Materials	Steel Dynamics, Inc.	26.9%
Communication Services	Meta Platforms, Inc.	37.5%
Energy	Marathon Petroleum Corporation	24.8%
Health Care	Intuitive Surgical, Inc.	37.0%
Consumer Staples	Walmart Inc.	25.6%
Real Estate	Weyerhaeuser Company	-1.2%

**#3 in Sector**

Sector	Company	Buyback ROI
Industrials	United Rentals, Inc.	48.7%
Financials	Arch Capital Group Ltd.	33.0%
Information Technology	Fair Isaac Corporation	63.7%
Consumer Discretionary	PulteGroup, Inc.	40.9%
Utilities	Sempra	12.3%
Materials	Linde plc	17.7%
Communication Services	T-Mobile US, Inc.	23.8%
Energy	Diamondback Energy, Inc.	23.5%
Health Care	Incyte Corporation	34.7%
Consumer Staples	Altria Group, Inc.	17.6%
Real Estate	SBA Communications Corporation	-6.5%



# The Important Role of Buybacks

Companies generally repurchase shares for three reasons. The first is to efficiently return capital to shareholders willing to sell their ownership in a company in part, or in whole, and redeploy the capital elsewhere. Such repurchases have the effect of reducing the number of shares outstanding, which concentrates future value creation (or destruction) for remaining shareholders.

Alternatively, companies also repurchase shares in the public market to offset newly issued shares awarded to employees as equity-based compensation. This form of repurchase is intended to reduce the net new shares issued and avoid dilution to existing shareholders that wish to retain their existing level of ownership in a company. In both cases, such repurchases are recorded in companies' cash flow statements as a purchase of common stock under financing activities.

A third form of repurchase occurs when an employee's equity-based compensation vests and is therefore treated as taxable income. To meet the company's obligation to withhold tax on taxable income, companies may net-share settle the equity-based compensation awarded to the employee. In effect, they are "repurchasing" shares that had been awarded to the employee, which results in reducing the company's diluted number of shares outstanding. This payment of the tax obligations related to

equity-based compensation is also recorded as a financing activity on the cashflow statement. For the purposes of our study, we do not distinguish between these three forms of repurchase activity.

Regardless of form, we continue to believe repurchases have a rightful place in the capital markets. The role of these markets is to move capital from where there is excess supply to where there is an unmet need for it. Investors and companies are thought of as the two sides of that market, but the investors themselves must first gather the capital that they will then allocate to companies.

This capital can come from places like insurance companies, pension funds, endowments, or family offices that have capital today, but no use for it until some future event. Capital can also come from investors' prior investments. When an investment has succeeded and produced a return in excess of what can be profitably redeployed within a company, buybacks serve as an efficient method to distribute such excess return through the capital markets to other companies with better growth prospects. Further, we believe restrictions on buybacks would, at best, result in higher dividends and, at worst, slow innovation and breed corporate complacency, as companies have less pressure to be efficient with their capital.

The importance of developing a thoughtful buyback policy took the

forefront in 2020. Many companies that bought back billions in stock from 2016 to 2019 had to raise capital to maintain solvency. Opponents of buybacks pointed out that, had these companies been more temperate with buybacks in prior years, not only could they have had the financial flexibility to weather the pandemic better in 2020, they would have also been poised to pursue more opportunistic investment. While some headlines in 2020 may have cast a shadow over the practice, we believe this should not diminish the important role buybacks play in recycling, and better allocating, capital across markets.

Companies have three primary options when considering how to deploy capital: value creation, financial flexibility, or value distribution. Companies should first consider value-creating growth opportunities that exceed their cost of capital. These can include organic growth, acquisition, or collaborative growth. If no attractive opportunities for growth exist, companies should consider the optimal level of financial flexibility—let 2020 be a reminder of that. Once value creation and financial flexibility are fully evaluated and funded, the last option should be distribution of capital back to shareholders either through dividends or buybacks.

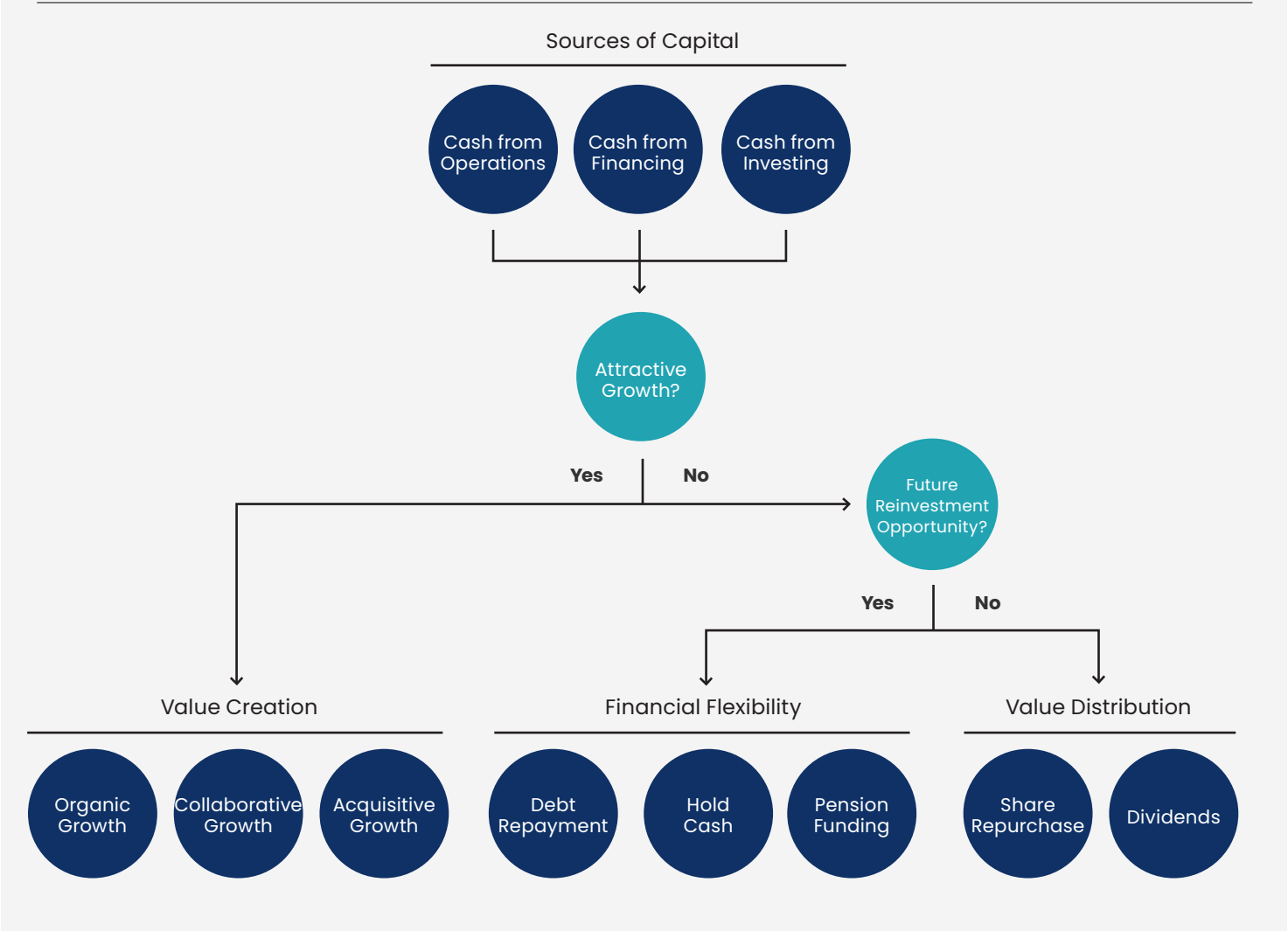
With that said, when a company decides to distribute capital to investors through buybacks, they should do so systematically,

applying the same discipline as with any other investment to ensure they are optimizing the “return” they earn. The best way to do this is to compare a company’s intrinsic value per share to the market value per share and repurchase shares when management believes,

based on objective analysis, that their shares are undervalued. Such valuation signals can be used to indicate when shares are likely undervalued—a good time to execute a repurchase; or when shares are likely overvalued—an excellent time to use those shares as acquisition currency. With

these signals in mind, Fortuna has developed a value-inspired buyback execution methodology, or “*VIBE*,” which helps companies understand their buyback prospects at any point in time.

FIGURE 13  
Hierarchy of Capital Allocation Choices



# The Debate Over Buybacks

The debate about whether or not a company should use its capital to buy back stock can be intense. Broad statements in favor or against buybacks lack nuance and the simple recognition that both sides have a similar goal in mind—that the earnings and cashflow of a business be put to good use. The difference comes in how the two sides believe that goal is most likely to be achieved.

Many in the anti-buyback camp believe the optimal allocation of capital, for the good of the company and all its stakeholders, is achieved by companies committing to strengthening their own balance sheets, increasing their employees' wages, and continually striving for growth. These are all choices a company has for allocating its capital internally, so an anti-buyback philosophy is implicitly an argument that company managers are good allocators of capital—that their reinvestments within the company will lead to incremental value creation for the firm's employees, stakeholders, and shareholders.

If investors were confident companies could do this effectively, the debate would favor leaving capital at the original company to compound in value through effective reinvestment. For example, a long-term Amazon investor has done much better from the company reinvesting in its business than if Amazon had repurchased that stock along the way, forcing the investor to find a new use for the capital.

But buyback proponents believe examples like Amazon are rare, and that professional investors tend to be better capital allocators than company managers thanks to their dedicated skill sets and to the sharper edge of their results-oriented environment. Professional investors can also more efficiently re-allocate capital within a sector, or from one sector to another, to support overall economic growth through secular shifts in the way value is created.

The question, then, is not really whether buybacks are "good" or "bad," but whether corporate managers are good or bad at allocating the



**The real question is not whether buybacks are “good” or “bad,” but whether corporate managers are good or bad at allocating capital.**

capital entrusted to them by their investors, and whether and when they should return that capital. The answer to this question varies by industry and by management team. Indeed, a large part of Fortuna's practice is helping our corporate clients become better investors of their own capital.

---

For those with a strong view either way on this debate, we would like to understand your perspectives. Please feel free to email us at [info@fortuna-advisors.com](mailto:info@fortuna-advisors.com) to share your views or suggest a call for a discussion.



## Concluding Remarks

Thank you for your time and interest in our analysis and commentary. With the ever-increasing allocation of cash to buybacks, it's also becoming increasingly important for corporate leaders to understand how their buyback program can contribute or detract from a company's success.

This report aims to help companies evaluate and make the most of their own buyback prospects and performance. We hope that, as attitudes about buybacks evolve, companies will continue to embrace careful and comprehensive planning for buybacks, as they would with any substantial capital outlay.

**Better-informed buyback programs can lead the way to more value creation for all stakeholders, and to a better overall allocation of resources across the economy.**

---

### CONTACT US

Email: [info@fortuna-advisors.com](mailto:info@fortuna-advisors.com)

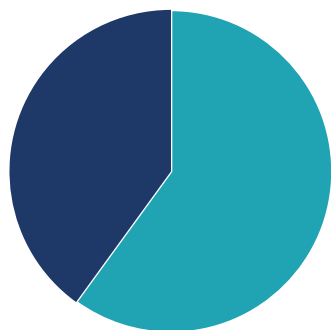
Tel: 631-478-5670

[www.fortuna-advisors.com](http://www.fortuna-advisors.com)

Managements know the key to creating value from buybacks is to concentrate repurchases when share prices are low. Unfortunately for all stakeholders, more than half of S&P 500 repurchasers bought back more shares when their prices were above the trend, from 2002-2024.

VIBE is a fact-based platform that provides managements with real-time signals to help override natural biases, limited information, and human error to better inform the timing of share repurchases.

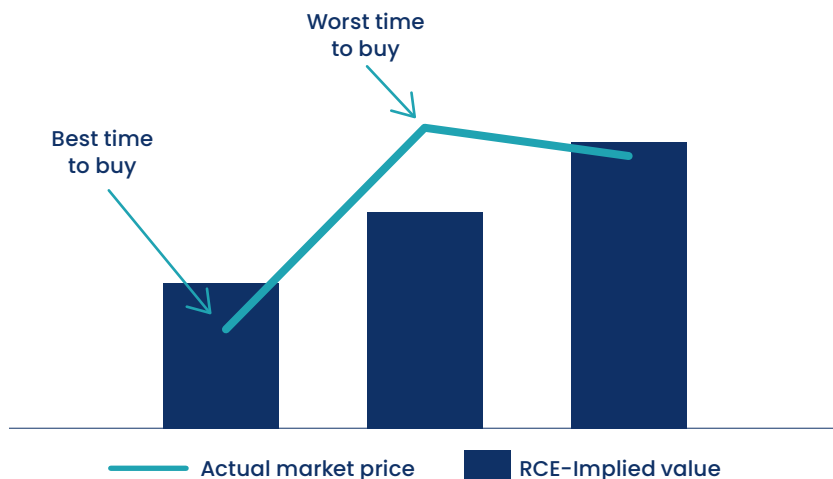
Buyback programs can and should be sources of immense value for many companies. VIBE can help them harness it.



FROM 2020-2024

**60%**

of S&P 500 repurchasers had a net-negative timing impact, meaning substantial value was left on the table for shareholders.



## VIBE signals:

### 1 PERFORMANCE & VALUATION

Based on the company and its peers, indicates the likelihood of a desirable Buyback ROI.

### 2 CONSENSUS VS. PRICE

Based on the dividend yield and an expected share price CAGR, derived from consensus EPS growth.

### 3 RCE-IMPLIED PREMIUM

Based on Fortuna Advisors' Residual Cash Earnings (RCE) measure of intrinsic share value.

### 4 VIBE SIMULATIONS

Based on 1000+ simulations that incorporate growth, margins, and asset intensity.

*If you would like to learn more about how Fortuna Advisors can help improve your buyback program, or would like a summary of your company's Buyback ROI performance, please feel free reach out to us.*

#### CONTACT US

Email: [info@fortuna-advisors.com](mailto:info@fortuna-advisors.com)

Tel: 631-478-5670

[www.fortuna-advisors.com](http://www.fortuna-advisors.com)

# 2025 Fortuna Advisors Buyback ROI Ranking

Rank	Company Name	Total Buybacks (\$ millions)	Buyback ROI	Buyback Effectiveness	Rank	Company Name	Total Buybacks (\$ millions)	Buyback ROI	Buyback Effectiveness
1	Vistra Corp.	4,931	115.0%	49.5%	77	Diamondback Energy, Inc.	3,807	23.5%	1.7%
2	NVIDIA Corporation	67,312	114.2%	11.1%	78	Leidos Holdings, Inc.	2,069	23.2%	6.9%
3	Targa Resources Corp.	1,652	70.5%	22.3%	79	Vertex Pharmaceuticals Incorporated	4,709	22.7%	3.9%
4	General Electric Company	8,215	65.0%	28.2%	80	AutoZone, Inc.	15,600	22.3%	0.0%
5	Broadcom Inc.	32,463	64.3%	11.2%	81	Cencora, Inc.	4,179	22.3%	-1.4%
6	Fair Isaac Corporation	4,115	63.7%	13.1%	82	CBRE Group, Inc.	3,858	22.2%	2.9%
7	Arista Networks Inc	2,163	59.3%	5.6%	83	Carrier Global Corporation	3,482	22.2%	NA
8	Howmet Aerospace Inc.	1,801	55.3%	12.8%	84	Synchrony Financial	9,301	22.1%	6.8%
9	Netflix, Inc.	13,142	52.1%	24.0%	85	W. R. Berkley Corporation	1,404	22.0%	4.8%
10	Deckers Outdoor Corporation	1,536	51.4%	3.1%	86	Apple Inc.	451,957	22.0%	-6.5%
11	Eli Lilly and Company	6,500	51.3%	0.7%	87	Synopsys, Inc.	4,261	22.0%	-6.7%
12	Dell Technologies Inc.	9,801	49.3%	7.5%	88	The Bank of New York Mellon Corporation	11,472	21.4%	6.9%
13	Apollo Global Management, Inc.	2,477	49.0%	11.1%	89	Cboe Global Markets, Inc.	895	21.2%	6.7%
14	United Rentals, Inc.	4,029	48.7%	4.9%	90	Republic Services, Inc.	1,299	21.2%	0.4%
15	NRG Energy, Inc.	3,040	46.9%	19.8%	91	Snap-on Incorporated	1,388	20.5%	1.5%
16	Builders FirstSource, Inc.	7,774	46.6%	-1.8%	92	Baker Hughes Company	2,284	20.4%	4.2%
17	General Motors Company	20,679	44.4%	33.1%	93	JPMorgan Chase & Co.	56,741	20.0%	3.5%
18	KKR & Co. Inc.	1,152	42.9%	1.8%	94	Discover Financial Services	6,988	20.0%	2.1%
19	PulteGroup, Inc.	4,413	40.9%	9.5%	95	Wells Fargo & Company	56,047	19.7%	10.5%
20	Booking Holdings Inc.	24,973	40.5%	17.3%	96	Alphabet Inc.	264,445	19.5%	-2.2%
21	Palo Alto Networks, Inc.	4,224	40.5%	1.9%	97	Microsoft Corporation	121,523	19.5%	-4.3%
22	Trane Technologies plc	4,501	39.2%	3.7%	98	Tractor Supply Company	3,096	19.5%	-5.4%
23	Salesforce, Inc.	19,449	38.9%	20.4%	99	The Travelers Companies, Inc.	7,072	19.4%	3.4%
24	GoDaddy Inc.	4,309	37.6%	12.3%	100	Dover Corporation	1,323	19.4%	4.3%
25	Meta Platforms, Inc.	162,120	37.5%	10.1%	101	Berkshire Hathaway Inc.	71,710	19.4%	2.7%
26	Intuitive Surgical, Inc.	4,174	37.0%	11.7%	102	Morgan Stanley	35,213	19.2%	-4.6%
27	TransDigm Group Incorporated	1,247	37.0%	11.1%	103	The Allstate Corporation	6,798	19.1%	3.6%
28	Eaton Corporation plc	4,771	36.0%	1.1%	104	Verisk Analytics, Inc.	5,841	19.1%	4.3%
29	W.W. Grainger, Inc.	4,108	35.0%	3.5%	105	BlackRock, Inc.	9,440	19.1%	-0.3%
30	Parker-Hannifin Corporation	1,580	35.0%	4.0%	106	Tapestry, Inc.	4,481	18.7%	-0.2%
31	Incyte Corporation	2,153	34.7%	39.6%	107	Old Dominion Freight Line, Inc.	3,599	18.7%	-7.0%
32	Williams-Sonoma, Inc.	3,414	34.6%	-2.8%	108	Chubb Limited	12,571	18.4%	2.8%
33	Westinghouse Air Brake Technologies Corporation	2,534	33.7%	9.6%	109	HCA Healthcare, Inc.	25,509	18.2%	-3.1%
34	Arch Capital Group Ltd.	1,933	33.0%	10.8%	110	AbbVie Inc.	7,079	18.1%	-3.5%
35	Ameriprise Financial, Inc.	10,024	32.9%	1.9%	111	Linde plc	20,677	17.7%	-1.5%
36	Cintas Corporation	4,036	32.6%	4.0%	112	Altria Group, Inc.	7,900	17.6%	5.8%
37	Packaging Corporation of America	837	31.9%	10.2%	113	Hewlett Packard Enterprise Company	1,499	17.6%	7.6%
38	Motorola Solutions, Inc.	3,028	31.8%	5.2%	114	Cummins Inc.	2,444	17.5%	-0.3%
39	Costco Wholesale Corporation	4,370	31.5%	3.0%	115	Johnson Controls International plc	6,677	16.9%	0.5%
40	Oracle Corporation	55,234	31.3%	2.2%	116	Micron Technology, Inc.	4,702	16.7%	0.0%
41	Hilton Worldwide Holdings Inc.	7,419	31.1%	9.4%	117	Las Vegas Sands Corp.	2,263	16.7%	19.8%
42	Caterpillar Inc.	20,767	31.0%	4.5%	118	Amazon.com, Inc.	6,000	16.7%	-1.3%
43	Cardinal Health, Inc.	4,388	30.8%	7.8%	119	Automatic Data Processing, Inc.	6,731	16.6%	1.6%
44	Ralph Lauren Corporation	2,026	30.8%	11.3%	120	Citizens Financial Group, Inc.	2,713	16.5%	7.6%
45	McKesson Corporation	13,770	30.8%	-1.4%	121	Universal Health Services, Inc.	3,479	16.5%	8.0%
46	KLA Corporation	9,952	30.4%	-2.6%	122	MetLife, Inc.	15,090	16.5%	0.9%
47	Jabil Inc.	4,675	30.0%	1.1%	123	Moody's Corporation	4,454	16.4%	-0.9%
48	Aflac Incorporated	11,847	29.5%	9.4%	124	Emerson Electric Co.	5,569	16.3%	2.4%
49	Marriott International, Inc.	10,959	29.4%	11.4%	125	General Dynamics Corporation	4,779	16.3%	3.3%
50	Chipotle Mexican Grill, Inc.	3,316	29.4%	-0.7%	126	Waste Management, Inc.	5,000	16.3%	0.6%
51	ServiceNow, Inc.	3,941	29.2%	-1.3%	127	Applied Materials, Inc.	18,707	16.1%	-9.0%
52	Blackstone Inc.	3,323	28.3%	-2.8%	128	Loews Corporation	4,245	16.1%	4.7%
53	Amphenol Corporation	3,141	28.2%	3.8%	129	Marsh & McLennan Companies, Inc.	5,918	16.0%	-1.7%
54	Gartner, Inc.	4,217	28.0%	0.3%	130	Mastercard Incorporated	39,888	15.9%	2.1%
55	Fortinet, Inc.	5,964	27.8%	-6.4%	131	Corning Incorporated	1,071	15.8%	1.9%
56	D.R. Horton, Inc.	6,539	27.7%	0.6%	132	Lockheed Martin Corporation	22,702	15.3%	4.6%
57	Lennox International Inc.	1,138	27.5%	4.7%	133	State Street Corporation	8,433	15.0%	4.9%
58	Raymond James Financial, Inc.	2,650	27.3%	3.4%	134	Intuit Inc.	11,345	15.0%	-4.4%
59	Fiserv, Inc.	17,953	27.0%	12.3%	135	Seagate Technology Holdings plc	4,706	14.9%	-1.3%
60	Steel Dynamics, Inc.	5,632	26.9%	-6.6%	136	Masco Corporation	3,767	14.9%	1.0%
61	NetApp, Inc.	4,033	26.6%	6.1%	137	The Kroger Co.	9,182	14.9%	-4.1%
62	RTX Corporation	18,495	26.4%	15.0%	138	DaVita Inc.	5,768	14.9%	-3.3%
63	Cadence Design Systems, Inc.	4,007	26.4%	-5.7%	139	The Sherwin-Williams Company	9,253	14.9%	-0.5%
64	International Business Machines Corporation	2,081	26.3%	8.2%	140	Willis Towers Watson Public Limited Company	6,093	14.8%	3.1%
65	O'Reilly Automotive, Inc.	13,073	26.2%	2.6%	141	American International Group, Inc.	13,969	14.8%	4.1%
66	The Goldman Sachs Group, Inc.	30,510	26.1%	1.8%	142	Fox Corporation	5,680	14.6%	7.0%
67	Ingersoll Rand Inc.	1,524	25.9%	0.8%	143	Ross Stores, Inc.	4,027	14.6%	7.6%
68	Expedia Group, Inc.	5,173	25.9%	16.5%	144	Gen Digital Inc.	2,749	14.5%	-2.9%
69	Walmart Inc.	29,605	25.6%	5.8%	145	Nasdaq, Inc.	2,563	14.4%	-4.3%
70	American Express Company	21,853	25.4%	3.8%	146	S&P Global Inc.	20,230	14.1%	-1.1%
71	The Hartford Insurance Group, Inc.	6,367	25.0%	7.0%	147	Lam Research Corporation	13,404	14.1%	-8.7%
72	The TJX Companies, Inc.	9,659	24.9%	7.1%	148	Jacobs Solutions Inc.	1,902	14.1%	0.4%
73	Marathon Petroleum Corporation	32,169	24.8%	1.0%	149	Juniper Networks, Inc.	1,555	14.0%	1.6%
74	NVR, Inc.	6,549	24.8%	4.3%	150	Lowe's Companies, Inc.	42,298	13.9%	-5.6%
75	Lennar Corporation	6,230	24.0%	-0.7%	151	Prudential Financial, Inc.	6,500	13.8%	2.0%
76	T-Mobile US, Inc.	48,402	23.8%	-0.3%	152	FedEx Corporation	8,268	13.8%	-0.7%
					153	Advanced Micro Devices, Inc.	9,187	13.8%	-13.4%

Rank	Company Name	Total Buybacks (\$ millions)	Buyback ROI	Buyback Effectiveness	Rank	Company Name	Total Buybacks (\$ millions)	Buyback ROI	Buyback Effectiveness
154	Analog Devices, Inc.	9,561	13.8%	-2.4%	237	Union Pacific Corporation	19,488	5.7%	-3.0%
155	Regions Financial Corporation	1,413	13.7%	0.6%	238	Monster Beverage Corporation	5,812	5.6%	-6.2%
156	HP Inc.	15,262	13.6%	-3.2%	239	Cognizant Technology Solutions Corporation	5,483	5.5%	-0.8%
157	Visa Inc.	59,684	13.6%	1.8%	240	ON Semiconductor Corporation	1,798	5.4%	-16.8%
158	Corpay, Inc.	5,586	13.5%	9.6%	241	Hologic, Inc.	3,284	5.3%	-3.8%
159	F5, Inc.	2,151	13.4%	2.0%	242	CDW Corporation	3,000	5.1%	-3.8%
160	Cincinnati Financial Corporation	1,008	13.3%	4.1%	243	Jack Henry & Associates, Inc.	750	4.7%	-0.6%
161	Intercontinental Exchange, Inc.	2,505	13.2%	0.4%	244	CSX Corporation	14,203	4.6%	-4.1%
162	MSCI Inc.	3,764	13.2%	-6.3%	245	PepsiCo, Inc.	6,176	4.5%	-2.1%
163	Everest Group, Ltd.	788	13.1%	3.1%	246	Trimble Inc.	1,048	4.5%	-6.1%
164	Assurant, Inc.	2,273	13.0%	0.8%	247	Keurig Dr Pepper Inc.	2,487	4.5%	-1.2%
165	Phillips 66	9,421	13.0%	5.7%	248	3M Company	5,863	4.3%	1.4%
166	The Home Depot, Inc.	30,896	12.8%	-2.1%	249	J.B. Hunt Transport Services, Inc.	1,378	4.3%	-5.4%
167	Texas Instruments Incorporated	7,917	12.8%	-0.4%	250	Teradyne, Inc.	2,160	4.3%	-8.3%
168	Omnicom Group Inc.	2,302	12.8%	3.8%	251	Mondelez International, Inc.	9,398	4.3%	-2.3%
169	M&T Bank Corporation	3,164	12.8%	4.7%	252	Keysight Technologies, Inc.	3,317	4.1%	-5.0%
170	UnitedHealth Group Incorporated	33,250	12.6%	-5.0%	253	Eastman Chemical Company	2,550	4.0%	-5.1%
171	Darden Restaurants, Inc.	2,262	12.5%	1.2%	254	Norfolk Southern Corporation	8,571	3.9%	-4.2%
172	Gilead Sciences, Inc.	5,675	12.4%	1.1%	255	AT&T Inc.	6,990	3.8%	2.2%
173	Ecolab Inc.	1,771	12.3%	5.3%	256	Thermo Fisher Scientific Inc.	13,601	3.8%	-8.1%
174	Otis Worldwide Corporation	3,382	12.3%	NA	257	U.S. Bancorp	3,531	3.8%	2.7%
175	Sempra	1,461	12.3%	4.9%	258	ANSYS, Inc.	1,100	3.7%	-3.3%
176	Aon plc	13,052	12.2%	-1.7%	259	Chevron Corporation	40,716	3.5%	-6.0%
177	International Paper Company	2,406	12.2%	2.0%	260	Agilent Technologies, Inc.	4,407	3.5%	-8.0%
178	Northrop Grumman Corporation	9,973	12.1%	2.6%	261	Elevance Health, Inc.	13,023	3.5%	-6.0%
179	Exxon Mobil Corporation	53,092	11.9%	-4.0%	262	KeyCorp	1,490	3.4%	-0.5%
180	Molina Healthcare, Inc.	2,366	11.9%	-6.5%	263	Adobe Inc.	30,634	3.4%	-6.8%
181	Principal Financial Group, Inc.	4,722	11.8%	-1.4%	264	Domino's Pizza, Inc.	2,559	3.3%	-6.8%
182	The Cigna Group	28,709	11.4%	-1.5%	265	Labcorp Holdings Inc.	3,936	3.1%	-6.6%
183	Accenture plc	19,759	11.3%	-3.0%	266	Kimberly-Clark Corporation	2,425	3.0%	-0.6%
184	Amgen Inc.	15,021	11.3%	1.7%	267	Invesco Ltd.	620	2.6%	-2.8%
185	FactSet Research Systems Inc.	859	11.3%	-2.5%	268	Fidelity National Information Services, Inc.	8,437	2.5%	9.8%
186	The PNC Financial Services Group, Inc.	7,772	11.2%	1.5%	269	Amcor plc	2,259	2.5%	-2.8%
187	Illinois Tool Works Inc.	6,456	11.1%	-0.8%	270	Sysco Corporation	2,746	2.4%	0.8%
188	QUALCOMM Incorporated	19,927	10.9%	-5.2%	271	Zoetis Inc.	5,621	2.3%	-5.6%
189	ConocoPhillips	24,655	10.9%	-5.1%	272	Abbott Laboratories	9,019	2.3%	-5.8%
190	Wynn Resorts, Limited	827	10.4%	15.5%	273	The Charles Schwab Corporation	6,237	2.0%	-9.5%
191	DuPont de Nemours, Inc.	9,395	10.4%	3.5%	274	Mettler-Toledo International Inc.	4,633	1.9%	-9.5%
192	Fifth Third Bancorp	2,318	10.1%	-2.9%	275	Constellation Brands, Inc.	4,062	1.8%	-4.2%
193	Northern Trust Corporation	1,888	9.7%	6.3%	276	Uber Technologies, Inc.	1,269	1.8%	-14.6%
194	eBay Inc.	20,497	9.5%	-3.8%	277	Comcast Corporation	38,928	1.8%	0.7%
195	McDonald's Corporation	11,526	9.5%	-1.4%	278	Pool Corporation	1,298	1.7%	-10.2%
196	Autodesk, Inc.	5,332	9.5%	-2.9%	279	Johnson & Johnson	16,985	1.6%	-3.8%
197	Cisco Systems, Inc.	28,764	9.4%	1.8%	280	LyondellBasell Industries N.V.	1,293	1.5%	-2.8%
198	Colgate-Palmolive Company	6,971	9.4%	-0.1%	281	Coterra Energy Inc.	2,260	1.4%	-10.1%
199	Capital One Financial Corporation	12,247	9.3%	-4.6%	282	The Hershey Company	1,937	0.9%	-4.9%
200	Corteva, Inc.	3,790	9.2%	-8.2%	283	The Campbell's Company	597	0.9%	-1.3%
201	Regeneron Pharmaceuticals, Inc.	18,302	9.1%	-9.1%	284	Best Buy Co., Inc.	5,668	0.5%	-6.5%
202	The Procter & Gamble Company	38,721	9.1%	-0.4%	285	IQVIA Holdings Inc.	4,363	0.4%	-6.7%
203	Deere & Company	18,485	8.7%	-10.3%	286	General Mills, Inc.	5,188	0.3%	-7.4%
204	Bank of America Corporation	54,904	8.7%	-0.3%	287	Bunge Global SA	2,114	0.2%	-11.2%
205	NXP Semiconductors N.V.	8,494	8.6%	-6.6%	288	Genuine Parts Company	1,064	0.2%	-6.3%
206	TE Connectivity plc	5,937	8.4%	-3.1%	289	Molson Coors Beverage Company	901	-0.1%	-4.0%
207	Nucor Corporation	10,108	8.3%	-12.6%	290	West Pharmaceutical Services, Inc.	1,513	-0.2%	-14.7%
208	PPL Corporation	1,004	8.3%	4.0%	291	Starbucks Corporation	7,374	-0.2%	-4.7%
209	Textron Inc.	3,227	8.2%	-4.0%	292	Lamb Weston Holdings, Inc.	575	-0.4%	-0.2%
210	EOG Resources, Inc.	4,459	8.2%	-7.7%	293	Akamai Technologies, Inc.	3,046	-0.4%	-2.7%
211	CF Industries Holdings, Inc.	4,167	8.1%	-6.7%	294	The Interpublic Group of Companies, Inc.	1,062	-0.5%	-10.1%
212	Electronic Arts Inc.	6,991	7.7%	-1.7%	295	Huntington Ingalls Industries, Inc.	546	-0.6%	-1.0%
213	Workday, Inc.	1,858	7.6%	-1.2%	296	The Clorox Company	1,248	-1.0%	-5.6%
214	Fortive Corporation	1,605	7.6%	2.1%	297	Weyerhaeuser Company	940	-1.2%	-6.2%
215	Quest Diagnostics Incorporated	4,475	7.6%	-2.7%	298	Ulta Beauty, Inc.	4,608	-1.3%	-10.0%
216	The Coca-Cola Company	5,732	7.6%	0.3%	299	Newmont Corporation	2,315	-1.5%	-7.4%
217	Merck & Co., Inc.	4,773	7.4%	-0.4%	300	T. Rowe Price Group, Inc.	3,955	-1.5%	-4.9%
218	Viatis Inc.	634	7.1%	13.0%	301	The Walt Disney Company	3,786	-1.6%	3.9%
219	Church & Dwight Co., Inc.	1,100	7.1%	-2.2%	302	Becton, Dickinson and Company	2,500	-1.9%	-1.8%
220	Avery Dennison Corporation	1,152	7.0%	-4.3%	303	Bristol-Myers Squibb Company	20,989	-1.9%	-4.9%
221	A. O. Smith Corporation	1,455	7.0%	-3.9%	304	Medtronic plc	9,058	-2.0%	0.0%
222	Honeywell International Inc.	16,664	6.9%	-0.3%	305	Henry Schein, Inc.	1,692	-2.0%	-3.6%
223	Freeport-McMoRan Inc.	2,080	6.9%	-20.2%	306	Truist Financial Corporation	2,866	-2.1%	-2.7%
224	Generac Holdings Inc.	1,026	6.8%	-5.6%	307	MGM Resorts International	8,532	-2.2%	-6.6%
225	L3Harris Technologies, Inc.	8,175	6.8%	1.0%	308	The J. M. Smucker Company	1,698	-2.3%	-6.9%
226	Allegion plc	963	6.6%	1.0%	309	IDEXX Laboratories, Inc.	2,726	-2.6%	-12.0%
227	Expeditors International of Washington, Inc.	4,757	6.4%	-4.2%	310	VeriSign, Inc.	4,683	-2.8%	-2.8%
228	Waters Corporation	1,555	6.4%	-3.8%	311	Conagra Brands, Inc.	629	-3.0%	-6.1%
229	C.H. Robinson Worldwide, Inc.	2,414	6.2%	-2.4%	312	Dow Inc.	4,723	-3.1%	-6.1%
230	Yum! Brands, Inc.	3,625	6.2%	-1.2%	313	Ford Motor Company	1,245	-3.2%	-10.5%
231	Rockwell Automation, Inc.	1,765	6.2%	-4.1%	314	Dominion Energy, Inc.	3,080	-3.2%	-0.4%
232	Valero Energy Corporation	12,771	6.1%	-5.2%	315	lululemon athletica inc.	3,701	-3.4%	-11.3%
233	Nordson Corporation	556	6.1%	-4.0%	316	Bio-Techne Corporation	529	-3.7%	-10.4%
234	Zebra Technologies Corporation	1,117	5.9%	-4.3%	317	Microchip Technology Incorporated	2,799	-3.9%	-11.9%
235	Citigroup Inc.	19,549	5.8%	3.7%					
236	Globe Life Inc.	2,953	5.7%	3.2%					



Rank	Company Name	Total Buybacks (\$ millions)	Buyback ROI	Buyback Effectiveness
318	PayPal Holdings, Inc.	22,757	-4.0%	0.2%
319	Mohawk Industries, Inc.	1,559	-4.3%	-4.8%
320	Revvity, Inc.	919	-5.1%	-10.3%
321	Franklin Resources, Inc.	1,022	-5.1%	-4.7%
322	Tyson Foods, Inc.	1,262	-5.2%	-1.0%
323	The Kraft Heinz Company	1,723	-5.5%	-11.1%
324	LKQ Corporation	2,130	-6.4%	-9.8%
325	SBA Communications Corporation	2,393	-6.5%	-6.5%
326	Edwards Lifesciences Corporation	4,904	-7.0%	-4.9%
327	Skyworks Solutions, Inc.	2,169	-7.3%	-7.7%
328	MarketAxess Holdings Inc.	384	-7.4%	-1.9%
329	Devon Energy Corporation	3,677	-7.5%	-21.2%
330	CarMax, Inc.	1,673	-7.9%	-4.6%
331	Zimmer Biomet Holdings, Inc.	1,687	-8.2%	-4.3%
332	Global Payments Inc.	8,349	-8.4%	-0.4%
333	Target Corporation	12,270	-8.8%	-14.4%
334	Paycom Software, Inc.	725	-8.9%	-6.3%
335	Ball Corporation	2,560	-9.1%	-8.2%
336	Occidental Petroleum Corporation	4,929	-9.2%	-14.8%
337	Halliburton Company	2,155	-9.3%	-16.4%
338	United Parcel Service, Inc.	6,981	-9.4%	-14.3%
339	EPAM Systems, Inc.	716	-10.7%	-12.9%
340	Danaher Corporation	5,979	-10.8%	-22.2%
341	Centene Corporation	8,767	-11.0%	-13.4%
342	Biogen Inc.	9,229	-12.0%	-2.8%
343	Schlumberger Limited	2,833	-12.2%	-16.9%
344	Charter Communications, Inc.	41,353	-12.6%	-8.3%
345	APA Corporation	2,845	-12.9%	-15.1%
346	Caesars Entertainment, Inc.	322	-13.6%	-9.6%
347	Stanley Black & Decker, Inc.	2,413	-15.7%	-9.1%
348	NIKE, Inc.	17,778	-15.9%	-13.7%
349	Align Technology, Inc.	2,019	-16.3%	-14.4%
350	Archer-Daniels-Midland Company	6,583	-16.5%	-22.5%
351	Intel Corporation	18,398	-16.9%	-2.9%
352	Pfizer Inc.	2,000	-17.4%	-16.4%
353	DexCom, Inc.	1,996	-18.1%	-25.1%
354	Baxter International Inc.	1,132	-18.8%	-4.7%
355	Humana Inc.	6,385	-19.8%	-17.7%
356	CVS Health Corporation	9,514	-20.6%	-19.4%
357	Dollar Tree, Inc.	3,065	-21.4%	-14.4%
358	The Mosaic Company	3,068	-22.1%	-27.5%
359	Paramount Global	386	-22.7%	-3.0%
360	Dollar General Corporation	7,764	-25.7%	-15.5%
361	Enphase Energy, Inc.	1,626	-26.4%	-42.7%
362	Walgreens Boots Alliance, Inc.	1,687	-29.7%	-3.8%
363	The Estée Lauder Companies Inc.	3,463	-34.5%	-22.5%