

# Exchange Traded Funds

## Banking on buybacks

ETF Research

### Buyback funds are historically best for shareholder returns

The S&P 500 buyback factor has led dividend factors by 220-380bps per year since 1994 and has led the broad index by 2,800%. Outperformance persists net of taxes (Exhibit 2). We have a Favorable View on buyback funds given 1) flexible sector exposure; 2) tax efficiency; and 3) widespread adoption of buybacks across management teams.

### \$11tn in gross buybacks since '98 shows desire

Buybacks proliferated after the SEC adopted rule 10b-18 in 1982, which provides companies a "safe harbor" against manipulation claims when conducting share repurchase programs. S&P 500 companies have notched \$11tn in gross buybacks since 1998 vs \$7.8tn in aggregate dividends (Exhibit 4). The focus on buybacks has also contributed to the lowest S&P 500 dividend yield since 1792 (Exhibit 5).

### Washington gridlock is good for buybacks

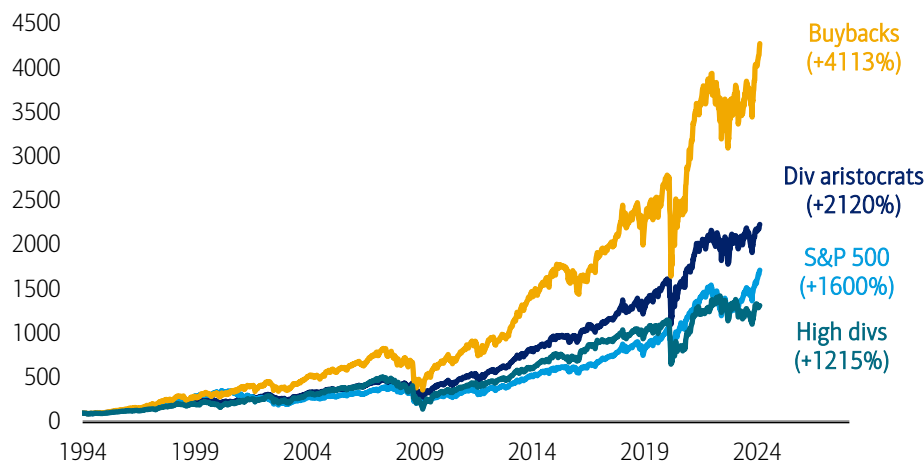
Potential risks for buyback programs include higher taxes, elevated index valuations, and investor preference for dividends. In our view, gridlock in Washington makes buyback-focused legislation unlikely to pass.

### DIVB for shareholder yield; PKW for buybacks

DIVB and PKW are still our top-rated buyback funds. DIVB is a total shareholder yield fund, despite its "core dividend" name, that prioritizes returned capital across dividends and buybacks. PKW is a pure buyback fund that holds US companies who have reduced shares by 5% over the past year. IPKW is the international version of PKW and is 2-rated.

#### Exhibit 2: Buybacks have been the most tax-efficient capital return factor

Cumulative returns of different S&P 500 factors, net of taxes\*



Source: BofA Global Research, Bloomberg. \*We assume a 20% tax rate on dividends assessed as QDI.

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Exchange-Traded Funds  
United States  
Other Financials

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#### Exhibit 1: Fund ratings

Ticker, new rating, old rating

| Ticker | Current rating | Old rating | Change  |
|--------|----------------|------------|---------|
| DIVB   | 1-FV           | 1-FV       |         |
| PKW    | 1-FV           | 1-FV       |         |
| IPKW   | 2-FV           | 3-FV       | Upgrade |

Source: BofA Global Research

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# Buyback ETFs – Favorable View

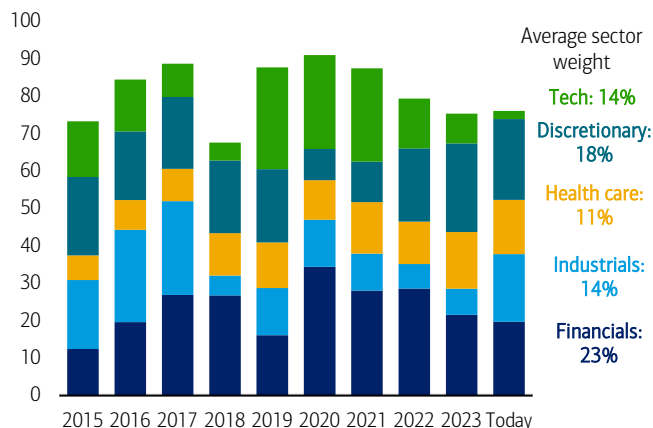
We reiterate our Favorable View on buyback ETFs. The buyback factor has led dividends by 220-380bps per year since 1994 and has outperformed the S&P 500 by 2,800%. Buyback outperformance looks stronger even when accounting for taxes.

Buyback ETFs are among the strongest total return vehicles in our coverage thanks to:

- **Flexible sector exposure:** PKW, a top-rated ETF that tracks a pure buyback screen, has seen sector weights vary dramatically over the past decade. For example, the fund had large tech sector exposure from 2019-2021 as tech companies were aggressively buying back shares (Exhibit 3). Today, the tech weight is just 2% with more exposure to consumer discretionary and financials.
  - **Tax efficiency:** buybacks have preferable tax treatment relative to non-qualified dividends. Where dividend disbursements are taxed in the year in which they are received, buybacks are essentially treated as capital gains.
  - **Widespread adoption:** S&P 500 management teams have embraced the flexibility of buyback programs with \$11tn in gross buybacks since 1998 vs \$7.8tn in aggregate dividends (Exhibit 4). Dividends are a firm commitment that might entice shareholders, but buybacks enable management teams to tactically return capital.
- The preference for buybacks has contributed to the lowest dividend yields in 230 years (Exhibit 5). Less emphasis on dividends has arguably made index equity funds like the S&P 500 more tax efficient wealth-building vehicles for long term investors.

**Exhibit 3: Buyback ETF sector exposures change over time**

Top 5 sector weights in PKW since 2015, %

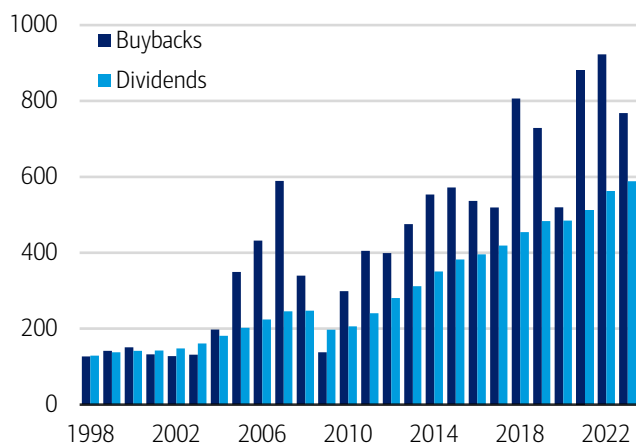


Source: BofA Global Research, Bloomberg.

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**Exhibit 4: US corporates have embraced buybacks > dividends**

Aggregate value of S&P 500 gross buybacks and dividends (\$bn)

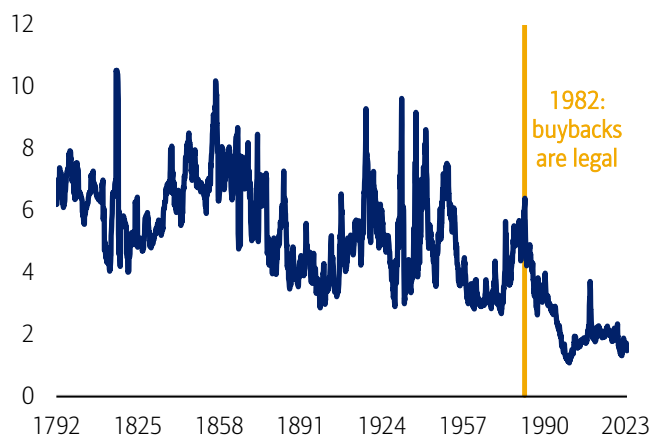


Source: BofA Global Research, Haver, Standard & Poor's. Note: 2023 data is annualized.

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**Exhibit 5: Dividend yield at 230-year lows as buybacks proliferate**

S&P 500 dividend yield, %



Source: BofA Global Research, Global Financial Data

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## A brief history of stock buybacks

Open-market share repurchases, informally known as stock buybacks, have been used extensively by corporates with extra cash to return value to shareholders since 1982.

The Securities Exchange Act of 1934 was enacted after the Great Depression with the intent to limit stock market manipulation. While the legislation did not explicitly ban buybacks, companies did not want to be exposed to claims of share price manipulation.

In 1982, the SEC adopted rule 10b-18, which provides companies with a “safe harbor” against manipulation claims when conducting buyback programs if certain regulatory criteria are met. Since then, buyback programs have proliferated.

### Three potential risks for buybacks

- Legislative:** House members introduced legislation in 2023 that would increase the tax on share repurchases from the 1% excise tax outlined in the 2022 Inflation Reduction Act (IRA). But gridlock in Washington means the legislation is unlikely to pass. The 2003 Tax Act reclassified qualified dividend income (QDI) as capital gains, and arguably eroded some tax advantages of buybacks vs dividends. But buybacks are not taxed in the current year if shareholders do not sell shares.
- High valuations:** S&P 500 valuations are currently trading in the 95<sup>th</sup> percentile relative to history which arguably makes buybacks less attractive. Savita Subramanian notes, however, that the composition of the index has changed dramatically in the past century and valuations for the 493 stocks outside the Magnificent 7 look more attractive.
- Preference for dividends:** investors might prefer regular dividend payments to periodic cash infusions if rates stay high. Buyback programs do, however, offer management teams more flexibility and can be executed over time.

## Buyback ETF Ratings

### Exhibit 6: Buyback ETFs - Ratings/Scores/Factors

Summary of Covered ETF Efficiency, Technical and Fundamental characteristics

| Ticker  | Name  | Rating | Total score | Efficiency    |   | Technical      |                    | Fundamental    |                 |
|---------|---|--------|-------------|---------------|---|----------------|--------------------|----------------|-----------------|
|         |   |        |             | Expense ratio | Holdings based weighted average daily value traded (\$bn) | Price momentum | Sortino ratio (5Y) | Stock exposure | Sector exposure |
| DIVB    | iShares Core Dividend ETF                   | 1-FV   | 78          | 0.05%         | 0.95  | 7.3%           | 0.59               | 54%            | -6%             |
| PKW     | Invesco BuyBack Achievers ETF               | 1-FV   | 63          | 0.61%         | 0.43  | 7.1%           | 0.57               | 44%            | 33%             |
| IPKW    | Invesco International BuyBack Achievers ETF | 2-FV   | 33          | 0.55%         | 0.17  | 5.7%           | 0.36               | 50%            | 58%             |
| Average |   |        |             | 0.40%         | 0.51  | 6.7%           | 0.51               | 49%            | 28%             |

Source: BofA ETF Research, Bloomberg; Total score out of 100 possible points

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- DIVB**, iShares Core Dividend ETF, is our top-rated fund thanks to a low expense ratio and strong risk-adjusted returns. Stock exposure is in-line with average, but the fund has a negative sector exposure given a high weight to information technology (25%).

DIVB is a total shareholder yield fund despite its “core dividend” moniker. The fund screens for U.S. companies returning the most capital to shareholders through buybacks, dividends, or a combination of the two. Companies with the highest average shareholder yield (dividend + buyback yield) over the prior eight quarters are considered. The number of constituents in the fund is flexible and the fund is market cap weighted with a 4.9% cap on individual securities.

- PKW**, Invesco Buyback Achievers ETF, is also 1-rated with best-in-class price momentum and risk-adjusted returns. The fund has attractive sector exposure with high weights to energy and financials. PKW’s high expense ratio weighs on the efficiency score.

PKW tracks the NASDAQ US Buyback Achievers Index, which is comprised of US stocks that have reduced shares outstanding by 5% or more in the trailing 12 months. This approach identifies stocks where buyback programs are meaningfully returning capital relative to company market cap.



- **IPKW**, Invesco International Buyback Achievers, is 2-rated given relatively weak price momentum and risk-adjusted returns. The fund's stock exposure is particularly strong with the largest proportion of BofA Buy-rated stocks.

IPKW tracks the NASDAQ International BuyBack Achievers Index which is comprised of international stocks (ex-US) that have reduced shares outstanding by 5% or more in the trailing 12 months.

### Buyback valuations look attractive vs history & peers

Buyback funds have 7% free cash flow (FCF) yield, well above dividend funds and nearly double the S&P 500 (Exhibit 7).

High FCF relative to market cap means companies held in buyback funds have more flexibility to consistently return capital.

### The best buyback screens prioritize share reduction

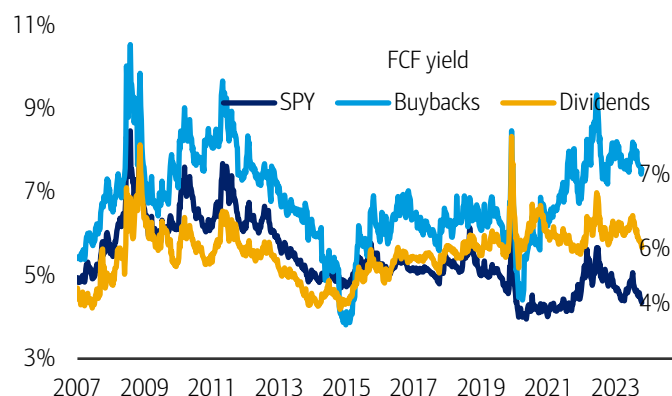
Effective buyback programs meaningfully reduce a company's shares outstanding. Buyback factors should focus on companies that are buying back a large proportion of shares, not just a large amount. Aggregate buybacks measure the nominal amount of shares repurchased and can be misleading as share prices rise over time.

Tech, health care, and discretionary stocks have accounted for nearly 60% of aggregate S&P 500 buybacks, on average, over the past 8 years (Exhibit 8).

But PKW, a fund that explicitly screens for net share reduction, only has a 2% weight in tech today with 20% exposure to consumer discretionary and financials (Exhibit 9). DIVB, a fund that prioritizes total shareholder yield, is overweight financials and energy.

### Exhibit 7: Buyback valuations look very attractive

Free cash flow yield for different equity indices

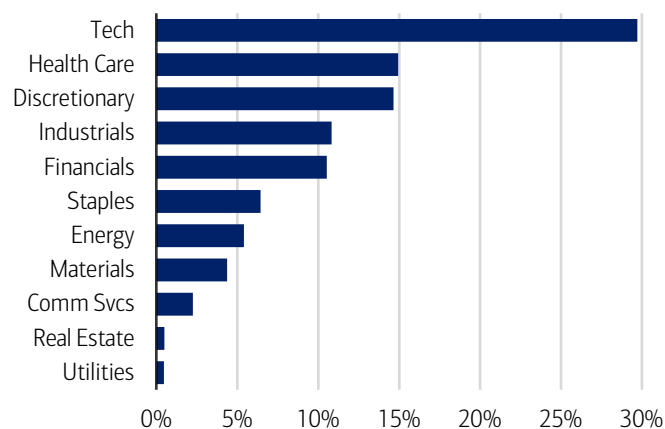


Source: BofA Global Research, Factset. Note: Simple average of ETFs in our coverage

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### Exhibit 8: Tech has highest proportion of buybacks per share...

% of buybacks per share by S&P 500 sector, average since 2016

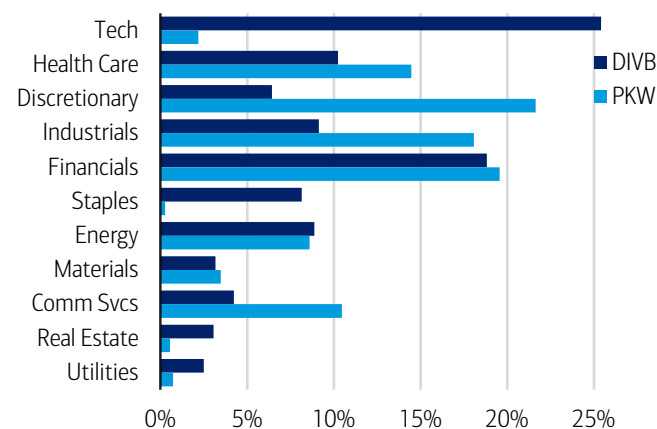


Source: BofA Global Research, Bloomberg

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### Exhibit 9: ...but not necessarily the largest share of buyback funds

Sector weight today of different buyback funds



Source: BofA Global Research, Bloomberg.

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# Appendix

## Understanding our evaluation process

BofA Global Research ETF ratings include both a view on the broad category (FV=Favorable View; NV=Neutral View; UF=Unfavorable View) and the specific fund relative to its peers (1=More Attractive; 2=Attractive; 3=Less Attractive).

We evaluate individual funds in three categories: Efficiency, Technical, and Fundamental. These first two groups use similar criteria across ETF categories:

- **Efficiency:** includes expense ratio and the weighted average daily value traded of the fund constituents.
- **Technical:** focuses on price momentum and risk-adjusted returns via the Sortino Ratio (returns vs downside volatility).

Our **Fundamental** ranking is typically determined by a combination of fund exposure to BofA equity analyst Underperform-rated names and Underweight industries.

## Understanding the ETF model output

ETF reports typically include a ratings table summarizing the key elements used to rate ETFs within a category. We provide a description of each column below within the context of our buyback ETF model:

- **Rating:** The number represents the view on a specific fund (1=More Attractive; 2=Attractive; 3=Less Attractive). The letters represent the category outlook (FV=Favorable; NV=Neutral; UF=Unfavorable).
- **Total score:** Funds are rated on a 100-point scale. Each category (Efficiency, Technical, and Fundamental) has points available equivalent to the category's weight in the ranking. For example, if Efficiency was 33% of the overall score, a fund could achieve a maximum of 33 points in the Efficiency category. Funds are ranked against each other to determine the number of points received per category. The scores for each category are then summed to arrive at the total score.
- **Fundamental rank:** Funds were ranked using buy rated vs underperform rated exposure to covered BofA names as well as weight to BofA Equity and Quant Strategy's sector designations.
- **Price momentum:** Three simple moving averages are used to calculate price momentum. We weight and sum the percent that a fund's closing price is above or below each moving average. A higher weighted percentage = stronger momentum.
- **Sortino ratio:** is used to measure risk-adjusted returns by comparing average annualized returns to downside deviation over the same period. Funds that have shown the highest returns relative to average pullbacks receive a higher rank.
- **Expense ratio:** The "all-in" net-expenses of a fund including management, interest, listing fees etc. as a percent of net assets under management.
- **Holdings based average daily value traded:** The average number of shares traded daily multiplied by the price that they traded at over the past three months. A higher number indicates greater liquidity and better efficiency. This calculation is repeated for all fund constituents, then a weighted average is taken. Funds with an average value traded greater than the group's median received a higher Efficiency score.



**Exhibit 10: ETFs mentioned**

Ticker, name, rating, price

| Ticker | Name  | Rating | Price  |
|--------|---|--------|--------|
| DIVB   | iShares Core Dividend ETF                   | 1-FV   | 43.08  |
| PKW    | Invesco BuyBack Achievers ETF               | 1-FV   | 102.66 |
| IPKW   | Invesco International BuyBack Achievers ETF | 2-FV   | 38.17  |

Source: BofA Global Research, Bloomberg

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# Disclosures

## Important Disclosures

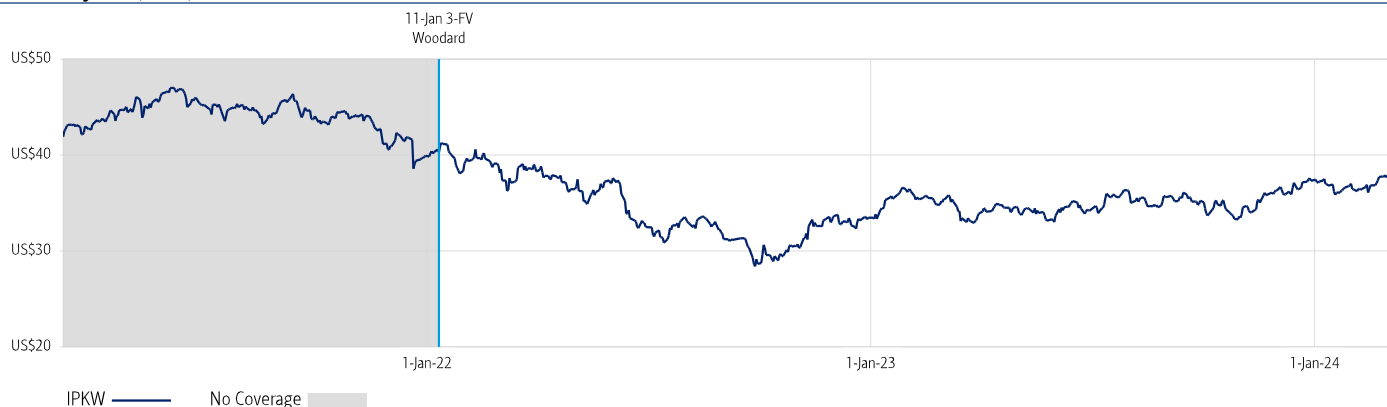
### Invesco Buyback ETF (PKW) Price Chart



1-FV, 2-FV, 3-FV, 1-NV, 2-NV, 3-NV, 1-UF, 2-UF, 3-UF – refer to Opinion Key below, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Exchange-Traded Fund Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

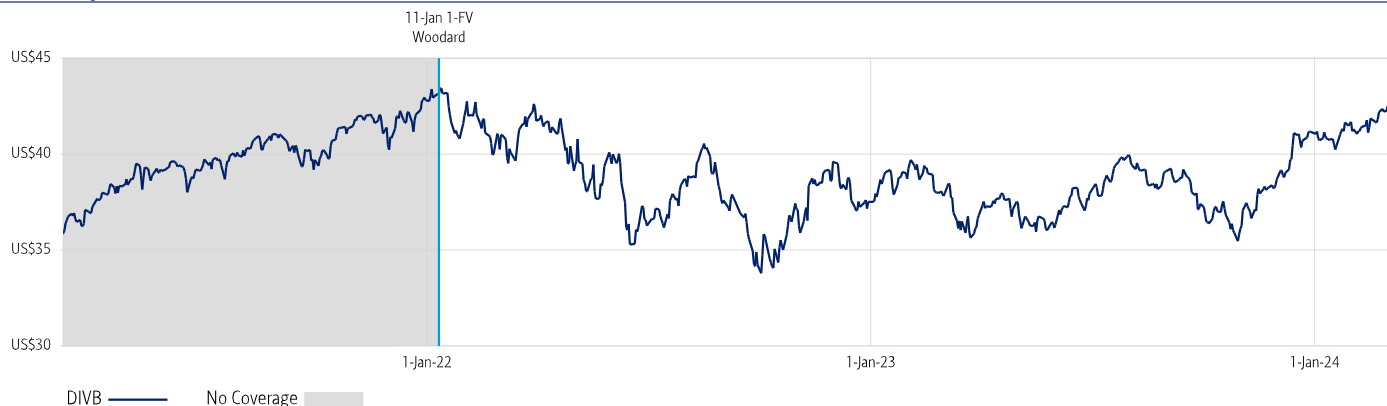
### Invesco Int'l Buyback (IPKW) Price Chart



1-FV, 2-FV, 3-FV, 1-NV, 2-NV, 3-NV, 1-UF, 2-UF, 3-UF – refer to Opinion Key below, NR: No Rating

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### iShares Div&Buyback (DIVB) Price Chart



1-FV, 2-FV, 3-FV, 1-NV, 2-NV, 3-NV, 1-UF, 2-UF, 3-UF – refer to Opinion Key below, NR: No Rating

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## iShares Div&amp;Buyback (DIVB) Price Chart

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| Coverage Universe | Count | Percent | Inv. Banking Relationships <sup>R1</sup> | Count | Percent |
|-------------------|-------|---------|--|-------|---------|
| Buy               | 80    | 19.61%  | Buy                                      | 53    | 66.25%  |
| Hold              | 317   | 77.70%  | Hold                                     | 241   | 76.03%  |
| Sell              | 11    | 2.70%   | Sell                                     | 7     | 63.64%  |

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