

U.S. Equities October 2022

Key Highlights

- The [S&P 500[®]](#) was up 7.99% in October, bringing its YTD return to -18.76%.
- The [Dow Jones Industrial Average[®]](#) gained 13.95% for the month and was down 9.92% YTD.
- The [S&P MidCap 400[®]](#) increased 10.42% for the month, bringing its YTD return to -14.39%.
- The [S&P SmallCap 600[®]](#) was up 12.27% in October and had a YTD return of -14.71%.

Exhibit 1: Index Returns

Index	1-Month (%)	3-Month (%)	YTD (%)	1-Year (%)	3-Year (%)
S&P 500	7.99	-6.25	-18.76	-15.92	27.47
Dow Jones Industrial Average	13.95	-0.34	-9.92	-8.62	21.03
S&P MidCap 400	10.42	-3.17	-14.39	-12.92	24.43
S&P SmallCap 600	12.27	-3.58	-14.71	-13.14	23.85

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes. Returns shown are price returns.

Market Snapshot

The S&P 500 recovered in October, posting a broad gain (7.99% for the month, but still down 18.76% YTD), as earnings came in better than expected. Not that earnings were good, but the expectations had been much worse, so the 69% beat rate (191 of the 276 reported), which is near the two-thirds historical average, helped. Also helping was some poor economic data (CPI year-over-year at 8.2%, PPI at 8.5%), which spurred hopes that the Fed may ease off the increases (or gave indications that it would in its Nov. 2, 2022, commentary), after next week's expected 0.75% increase (with most still expecting a 0.50% increase in December).

Contributor:

Howard Silverblatt, Senior Index Analyst, Product Management, howard.silverblatt@spglobal.com

S&P Dow Jones Indices' Market Attributes[®] series provides market commentary highlighting developments across various asset classes.

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

Additionally, flows helped, as the U.S. was seen as a more secure (and warming) climate for investment, and September's 9.34% fall appeared to attract some bargain hunters.

Higher product and living costs dominated the news and moods (as materials and labor costs posted earnings reports and guidance); the issue is expected to have a probable impact on the U.S. mid-term election (Nov. 8, 2022). Election news increased, as specific political-outcome portfolios (and public polls) pointed to a Republican House win, and supported a win for Republicans in the Senate as well, which would result in a split government (Republican Congress and Democratic executive branch), with Republicans controlling more states (governorships). Any variance from the expected would need to be reflected in the market level.

Retail earnings reports are scheduled to start next week, giving a clearer picture of where consumers are spending, along with guidance for the holiday season. Friday's job report may also have a market impact.

The expectation is for a continuation of volatility, as the market continues to reevaluate when the Fed will ease on its increases, with more expecting clear indications from its Dec. 13-14, 2022, meeting (Dec. 14, 2:30 p.m. conference call) than its Nov. 1-2, 2022, meeting (Nov. 2, 2:30 p.m. conference call).

Historically, the S&P 500 gains 57.4% of the time for October, with an average gain of 4.18% for the up months, a 4.67% average decrease for the down months and an overall average increase of 0.46%. For October 2022, the index was up 7.99%. In the forward November month, historically, the index posts gains 60.6% of the time, with an average gain of 4.00% for the up months, a 4.16% average decrease for the down months and an overall average increase of 0.83%.

The S&P 500 closed at 3,871.98, up 7.99% (8.10% with dividends) from last month's close of 3,585.62, when it was down 9.34% (-9.21%) from the prior month's close of 3,955.00 (-4.24%, -4.08%). The three-month period posted a loss of 6.25% (-5.86%), the YTD return was -18.76% (-17.70%) and the one-year return was -15.92% (-14.61%), with the index down 19.28% (-18.23%) from its Jan. 3, 2022, closing high, and was up 14.35% (19.45%) from its pre-COVID-19 Feb. 19, 2020, closing high. The Dow[®] ended the month at 32,732.95, up 13.95% (14.07% with dividends) from last month's close of 28,725.51, when it was down 8.84% (-8.76%) from the prior month's close of 31,510.43 (-4.06%, -3.72%). Key index marks were down 19.28% (-18.23%) from Jan. 3, 2022, and up 14.35% (18.44%) from its pre-COVID-19 Feb. 19, 2020, closing high. The Dow was down 11.05% from its Jan. 4, 2022, closing high (of 36,799.65). The three-month return was 1.04% (1.41%), the YTD return was -9.92% (-8.71%) and the one-year return was -8.62% (-6.89%).

The S&P 500 traded on better-than-expected earnings—not good ones, but better than expected—as the whispered concern over a steep earnings decline and dire Q4 predictions did not materialize. Economic data showed continuing high inflation, along with a strong underlying economy, with the Fed expected to make its fourth 0.75% increase at the Nov. 1-2, 2022, meeting (with likely a 0.50% increase at the Dec. 13-14, 2022, meeting). The S&P 500 stayed mostly within its 3,500-3,800 trading range (reaching 3,905), posting a monthly relief gain on earnings, while next month will center on FOMC actions and retail earnings (along with the Q4 2022 holiday guidance).

With 53% of the issues and 70% of the market value reported, Q3 2022 earnings are coming in better than expected (but still not good) and significantly better than the whispered expectations, as 276 issues have reported, with 191 beating estimates and 186 beating on sales, potentially setting a new sales record (which may be due to higher prices, not the sale of more product). Q3 2022 is expected to post an 11.9% gain over Q2 2022 and be up 0.8% over Q3 2021. Sales are expected to set a record, with a 1.9% increase over the Q2 2022 record and up 11.3% over Q3 2022. Significant EPS impact due to share count reduction for Q3 2022 was 20.6%, up from Q2 2021's 19.8% and Q3 2021's 7.4%. Operating margins for Q3 2021 are expected to increase to 11.93%, up from 10.86% in Q2 2022 (the average since 1993 was 8.26%, and the record was 13.54% in Q2 2021).

Daily intraday volatility (daily high/low) increased to 2.14% from last month's 1.91% (1.28% the month before that), as the YTD volatility was 1.88% (1.85% last month), 2021 was 0.97%, 2020 was 1.73%, 2019 was 0.85%, and 2018 was 1.21% (2017 was 0.51%, which was the low since 1962).

OPEC Plus met and decided to reduce their oil production by 2 million barrels a day (global daily production is approximately 79 million barrels per day); oil prices had already increased on expectations. Details revealed that not all countries were producing their limit, with analysts estimating that the actual market decline would be in the 0.8-0.9 million barrels per day, which is almost the same amount of oil the U.S. was releasing per day from the Strategic Petroleum Reserve (SPR), leaving some to conjecture that OPEC will reduce by whatever the U.S. releases. President Biden said he would extend the release of oil from the SPR to December 2022 (from October). To date, 165 million barrels have been released (the U.S. used an average 19.9 million barrels per day in 2021), with the SPR level now at 405 million barrels (the lowest since 1984); the U.S. will replace the SPR when the prices fall below USD 72 per barrel. Meanwhile, the EU sought emergency powers to cap gas prices.

Monkeypox spread has slowed and is now considered by many to be minimal, as some vaccination sites were scheduled to close. To date in the U.S., there have been 28,302 (25,613 last month) confirmed cases (according to the CDC), with 76,806 (68,017) worldwide.

Globally, 6.59 million have died from COVID-19 (6.54 million last month). In the U.S. to date, 97.5 million COVID-19 cases have been reported, up from 96.3 million last month. U.S. COVID-19-related deaths were at 1,070,000 (1,060,000). The seven-day U.S. average COVID-19 case rate decreased to 36,861 from last month's 48,806; it reached 1,417,493 on Jan. 11, 2022 (83,120 at the end of November 2021), as the death rate decreased to 352 (404). Concern grew that COVID-19 cases (including variants) would increase over the winter months.

The Reserve Bank of Australia raised its interest rates by 0.25% (to 2.6%), when a 0.50% increase was expected, as the bank said it was evaluating the situation. The FOMC minutes from the Sept. 20-21, 2022, meeting documented a greater concern over continued high inflation, as it saw the need for a weaker labor market to accomplish the task. The Beige Book said the Fed saw modest gains for the economy, as the "outlooks grew more pessimistic amidst growing concerns about weakening demand." The Bank of Canada increased interest rates 0.50% (to 3.75%; it was 0.25% at year-end 2021), when a 0.75% increase was expected, as it said there was a slight chance of a recession. The ECB met and, as expected, raised its interest rates by 0.75% to 1.50%.

To date, the Q3 2022 earnings season had 276 issues reporting, as 191 beat on earnings and 186 beat on sales (potentially setting a new record). For Q3 2022, earnings are expected to post an 11.9% gain over Q2 2022 and be up 0.8% from Q3 2021. For 2022, earnings are expected to be down 1.9% over 2021, with a 2022 P/E of 19.0. The 2023 estimates showed a 13.4% gain over 2022, with a 2023 P/E of 16.7. Significant EPS impact due to share count reduction for Q3 2022 was 20.6%, compared with Q2 2021's 19.8% and 7.4% for Q3 2021 (22.9% for Q2 2019). Sales are expected to post a new record and be up 1.9% over Q2 2022 and up 11.2% over Q3 2021. Initial data indicates that while sales may set a record quarter, the record may be due to higher prices rather than more product sales. Operating margins for Q3 2021 are expected to increase, coming in at 11.93%, up from 10.86% in Q2 2022 (the average from 1993 was 8.26%, and the record is 13.54% in Q2 2021).

Goldman Sachs (GS) said it would reorganize its business into three divisions: (i) investment banking and trading; (ii) asset and wealth management businesses; and (iii) consumer banking (Marcus). JPMorgan Chase (JPM) CEO Jamie Dimon said he expected economic conditions to push the U.S. into a recession in the next six to nine months, citing "very serious" inflation, rising interest rates, quantitative tightening and the Russia-Ukraine conflict. The oldest U.S. bank, the Bank of New York Mellon (BK), said it would hold crypto accounts. Elon Musk completed his USD 44 billion purchase of social media issue Twitter (TWTR) and replaced senior management.

S&P Dow Jones Indices added Utilities issue PG&E (PCG) and Energy issues EQT Corporation (EQT) and Targa Resources (TRGP) to the S&P 500, removing software issue

Citrix (CTXS), Real Estate issue Duke Realty (formerly DRE) and Industrials issue Nielsen Company (formerly NLSN). S&P DJI said it would add Financials issue Arch Capital Group (ACGL) to the S&P 500 before the opening of Nov. 1, 2022, removing social media issue Twitter (formerly TWTR).

The 10-year U.S. Treasury Bond closed at 4.05%, up from last month's 3.81% (1.51% at year-end 2021, 0.92% at year-end 2020, 1.92% at year-end 2019, 2.69% at year-end 2018 and 2.41% at year-end 2017). The 30-year U.S. Treasury Bond closed at 4.20%, up from last month's 3.77% (1.91%, 1.65%, 2.30%, 3.02%, 3.05%). The pound closed at 1.1467, up from 1.1168 last month (1.3525, 1.3673, 1.3253, 1.2754, 1.3498); the euro closed at 0.9882, up from last month's 0.9801 (1.1379, 1.2182, 1.1172, 1.1461, 1.2000); the yen closed at 148.74 (after trading at 151.94) from last month's 144.72 (115.08, 103.24, 108.76, 109.58, 112.68); and the yuan closed at 7.3029 from last month's 7.1160 (6.3599, 6.6994, 6.9633, 6.8785, 6.5030). The U.S. dollar held and in some cases continued to strengthen, as concern over foreign earnings (and export prices) grew. Oil closed at USD 86.07 (it had reached USD 130.50 this year) from last month's USD 79.73 close and was up 14.2% YTD (USD 75.40), as EIA all-grade gasoline was up 15.2% YTD (USD 3.887, USD 3.832 last month and USD 3.375 at year-end 2021). From year-end 2020, oil was up 77.8% (from USD 48.42 a barrel), while gasoline was up 66.8% (from USD 2.330 a gallon). For 2021, the EIA reported that the makeup of gasoline costs was 53.6% from crude oil, 16.4% from federal and state taxes, 15.6% from distribution and marketing and 14.4% from refining costs and profits. Gold closed at USD 1,636.00, down from last month's USD 1,670.40 (USD 1,829.80 last month, USD 1,901.60 at the end of 2021, USD 1,520.00 at the end of 2020, USD 1,284.70 at the end of 2019 and USD 1,305.00 at the end of 2018). VIX[®] closed at 25.88, trading as high as 34.53 and as low as 25.75, down from 31.62 last month (17.22, 22.75, 13.78, 16.12 and 11.05). In 2021, it traded as high as 37.51 and as low as 14.10. In 2020, it traded as high as 85.47 and as low as 11.75.

Index Review

S&P 500

The S&P 500 closed at 3,871.98, up 7.99% (8.10% with dividends) from last month's close of 3,585.62, when it was down 9.34% (-9.21%) from the prior month's close of 3,955.00 (-4.24%, -4.08%). The three-month period posted a loss of 6.25% (-5.86%), the YTD return was -18.76% (-17.70%) and the one-year return was -15.92% (-14.61%), with the index down 19.28% (-18.23%) from its Jan. 3, 2022, closing high and up 14.35% (19.45%) from its pre-COVID-19 Feb. 19, 2020, closing high. Monthly intraday volatility (daily high/low) increased to 2.14% from last month's 1.91% (1.28% the month before that), as the YTD volatility was 1.88% (1.85% last month), 2021 was 0.97%, 2020 was 1.73% and 2019 was 0.85% and 2018 was 1.21% (2017 was 0.51%, which was the low since 1962). S&P 500 trading increased 2%

(adjusted for trading days) for October, after being up 32% in September, as the year-over-year rate was up 55%, and the 12-month trading volume was down 6% over the prior period. In October, 12 of the 21 trading days moved at least 1% (9 up and 3 down), as 8 moved at least 2% (6 up and 2 down). For September, 13 of the 21 days posted at least a 1% change (4 up and 9 down), as 2 moved at least 2% (both down). Year-to-date, 105 moved at least 1% (52 up and 53 down), with 41 moving at least 2% (21 up and 20 down). For 2021, there were 55 moves of at least 1% (34 up and 21 down), with 7 moving at least 2% (2 up and 5 down); in 2020, there were 109 days that posted a 1% move (64 up and 45 down); 2019 posted 22 up at least 1% and 15 down at least 1%). Of the 21 trading days in October, 19 had a high/low intraday spread of at least 1% (last month had 20 of the 21 trading days), with 3 having at least a 3% spread (1 last month); YTD, 185 had at least a 1% spread, with 80 having at least 2%, 18 having at least 3%, 3 at least 4%, and 1 at least 5% (on Oct. 13). For 2021, there were 93 at 1% and 3 at 3%; for 2020, there were 158 at 1% and 34 at 3%; for 2019, there were 73 at 1% and 1 at 3%; and in the fun days of 2008, there were 228 (of the 253 trading days) and 75, respectively.

Breadth increased significantly in October, as 426 issues gained (an average of 12.22% each), up from September's 27 issues (4.36%) and August's 132 (4.01%). Gains of 10% or more increased to 241 (average gain was 17.21%) from last month's 3 (22.78%) and the prior month's 8 (16.43%); 26 issues gained at least 25% (32.86%), compared with 1 (36.66%) last month and none the month before that. On the downside, 76 issues fell (an average loss of 5.30%), compared with 476 issues last month (-10.26%) and the prior month's 369 (-6.32%). For October, 7 issues declined at least 10% (-21.65%), down from September's 233 issues (-14.49%) and August's 71 issues (-13.51%); 3 issues fell at least 25% (-32.50%), 10 (-26.52%) did so last month and none the month before that. For the three-month period, breadth increased but stayed negative, as 185 issues gained an average of 10.24%, compared with 147 (8.15%) last month, while 316 issues declined (average -12.56%), down from 356 (-10.68%) last month. Gains of at least 10% were posted by 71 issues (19.69%), up from 44 (18.17%) last month, and declines of at least 10% were posted by 173 issues (-18.70%), compared with the prior month's 161 issues (-17.04%). For the three-month period, 14 (7 last month) issues were up at least 25%, while 27 (20) were down at least 25%. Year-to-date, breadth improved but remained strongly negative, as 122 issues gained an average of 24.91%, compared with 70 (18.16%) last month, while 379 issues declined (average -24.91%), down from 432 (-27.32%) last month. Gains of at least 10% were posted by 83 issues (34.45%), up from 43 (26.74%) last month, and declines of at least 10% were posted by 315 issues (-28.87%), compared with the prior month's 372 issues (-30.89%). Year-to-date, 39 (17 last month) issues were up at least 25% and 171 (239) were down at least 25%. For 2021, breadth was strongly positive, as 434 issues gained an average of 34.30% and 70 issues declined (average -12.01%). In 2021, gains of at least 10% were posted by 367 issues (39.77%), compared with 36 issues that declined at least 10% (-19.27%), while 259 issues were up at least 25% and 7 were down at least 25%.

The Dow

With its 13.95% gain, The Dow had the 13th best month in its history, which started in 1896, and its best month since January 1976's 14.41% gain (which even pre-dates me, since I started in May 1977), doing the best of any of the indices reported on here. Last month it also did the best, but last month's best translated into an 8.84% September decline.

Most developed markets rebounded in October, with the U.S. doing better than most, as the domestic economy was seen as being in better shape than most other nations, especially with respect to Energy issues, which while expensive and painful, also were significantly better than most, especially Europe. A slower economy was also seen as a precursor to the Fed eventually slowing the pace of increases, which at this point is expected in December, with a 0.50% increase, compared to the expected 0.75% on Nov. 1-2, 2022.

For the month, the index closed at 32,732.95, up 13.95% (14.07% with dividends) from last month's 28,725.51 close, when it was down 8.84% (-8.76%) from the prior month's 31,510.43 close (-4.06%, -3.72%). The three-month return was -0.34% (up 0.20%), the YTD return was -9.92% (-8.42%) and the one-year return was -8.62% (-6.74%). The 3-year return was 21.03% (28.88% with dividends, 8.83% annualized), the 5-year return was 40.02% (56.21%, 9.33%) and the 10-year return was 149.94% (215.80%, 12.19%). Intraday volatility decreased, while intraday swings (high/low) of at least 1% increased, and 20 of 21 days moved at least 1%, down from last month's all 21 days and up from August's 15 of 23. For October, 9 days increased 1% (3 last month and 3 the month before that), while 3 declined at least 1% (8, 3). Year-to-date, 45 were up at least 1% (24 for 2021), as 42 were down at least 1% (19 for 2021).

Gains were broad, with 28 of the 30 issues up for the month, which was a full reversal from September's 2 gainers and 28 decliners (August had 4 gainers and 26 decliners). U.S. equities reacted to better-than-expected earnings and economic reports, which showed a slowing of the economy and raised hopes that the Fed would soon ease off its increases. Specifically, while 0.75% is expected from the Nov. 1-2, 2022, meeting, the Street expects a smaller increase of 0.50% at the Dec. 13-14 meeting. For the month, gains, which may be more of a rebound from the YTD declines, were significant, as 21 issues posted double-digit gains. Heavy machinery issue Caterpillar (CAT) did the best, adding 31.92% for the month, it turning positive YTD (1 of 10 in The Dow), up 4.70%, accounting for 8.6% of The Dow's October return. Chevron (CVX) gained 25.91% and was up 54.15% YTD (the best issue in the index YTD), as aerospace issue Honeywell (HON) was up 22.19% and down 2.15% YTD. Health Care issue UnitedHealth (UNH), which is the largest issue in the index (11.7% of the weight), posted 9.82% October gain (up 10.56% YTD), as Goldman Sachs, which has the second-largest weight (a distant 7.3%), was up 17.56% (and down 9.94% YTD). Communication Services issue Verizon (VZ) did the worst, falling 1.58% for the month and down 28.08% YTD, and software issue Microsoft (MSFT) was the other decliner, off 0.33% for

the month and down 30.98% YTD. Of note, several issues rebounded, but remained deeply in the red YTD, as JPMorgan Chase was up 20.46% for the month (-20.51% YTD), Boeing (BA) gained 17.70% (-29.21% YTD) and Walgreens Boots Alliance (WBA) moved up 6.24% (-30.02% YTD). Apple (AAPL) gained 10.96% but remained down 13.65% YTD.

For the month, breadth improved and was strongly positive, as 28 of the 30 issues gained, with an average gain of 14.66% each, compared with last month's 2 gainers (1.07%) and the prior month's 4 (2.11%). For October, 21 issues gained at least 10% (17.01%), compared with none in September and August. On the downside, 2 issues declined (an average loss of 0.96%), compared with 28 (-10.57%) last month and 26 (-5.37%) the month before that (-5.37%). No issue declined at least 10%, compared with 15 (-13.82%) last month and 4 (-12.99%) the month before that. For the three-month period, breadth improved, as 14 issues gained an average of 6.92%, compared with 3 (2.79%) last month and 7 (5.50%) the month before that. On the downside, 16 issues declined an average of 9.70%, while 27 issues declined (-10.11%) last month and 23 (-10.32%) the month before that. Three issues gained at least 10% (13.32%), compared with none in September and 1 (21.96) in August, as 8 declined at least 10% (-15.50%), down from last month's 11 (-16.81%) and August's 9 (-17.48%). Breadth declined and remained negative YTD, as 10 issues gained an average of 14.75% each, compared with 4 (8.89%) last month and 6 (10.64%) the month before that; 5 issues were up at least 10% (26.97%), compared with 2 last month (17.40%). On the downside, 20 issues declined an average of 22.88%, compared with last month's 26 (-26.02%) issues and the prior month's 24 (-19.28%); 15 issues declined at least 10% (-28.69%), compared with 23 issues last month (-28.89%) and 17 (-24.37%) the month before that. For 2021, breadth was positive, as 23 issues gained an average of 23.08% each, while 16 were up at least 10% (31.27%). On the downside, 7 issues declined an average of 6.20%, while 2 declined at least 10% (-13.04%).

S&P MidCap 400

The S&P 400[®] continued to go with the crowd in October, posting a broad gain. Note that all four indices posted gains, but varied in results, ranging from The Dow's 13.95% gain to the S&P 500's 7.99% (YTD, the range was from The Dow's 9.92% decline to the S&P SmallCap 600's 14.71% decline). For the month, the S&P MidCap 400 added 10.42%, after September's broad decline of 9.36% and August's fall of 3.25% (July rebounded 10.75%, its best month since November 2020's 14.12%). The gains represented a risk-on environment, as the two current major unknowns appeared to be near an end—what the Fed would do in November (raise interest rates 0.75%) and the mid-term election results (an expected mixed government, with Republicans expected to control Congress and Democrats the White House). All 11 sectors gained, compared with none last month and 2 gainers in August, as breadth turned strongly positive. The mid-cap index's three-month return was -3.17% (the S&P 500 was -6.25%), while the YTD return was down 14.39%, with only The Dow's YTD return

of -9.92% coming in better. The one-year return was -12.92%, and the two-year period posted a 28.04% gain. For the 3-, 5- and 10-year returns, the index posted gains of 24.43%, 32.58% and 148.16%, respectively (annualized with dividends, they were 9.20%, 7.47% and 11.23%, respectively).

All 11 sectors gained in October, compared with no gainers in September and 2 in August. Sector spread increased, as the difference between the best (Energy, 22.15%) and worst (Real Estate, 5.35%) sectors increased to 23.61% from last month's 10.58%, and the YTD spread increased to 85.35% (53.18% last month). The 2021 spread was 66.59%, down from the 2020 spread of 76.16%. For the month, Energy did the best, adding 22.15%, as the sector was up 48.55% YTD (the best of any mid-cap sector), and up 42.30% for the one-year period (also the best). Materials was a distant second, gaining 13.82% for the month, was down 10.23% YTD and down 5.71% for the one-year period, with Financials close behind, up 13.40% for the month, -1.86% YTD and -1.11% for the one-year period. Consumer Staples added 11.75% (down 0.18% YTD and up 3.60% for the one-year period), as Consumer Discretionary gained 11.75% (down 23.53% YTD and -23.63% for the one-year period). Information Technology was up 6.29%, down 23.00% YTD and down 23.22% for the one-year period. Real Estate did the worst, as it added 5.35% for the month, was down 27.38% YTD and was down 22.63% for the one-year period.

Breadth significantly improved and became strongly positive for the month, as 356 issues gained for the month, with an average increase of 13.49%, up from last month's 38 gainers (3.86%) and the prior month's 110 (7.12%). There were 227 issues that gained at least 10% (18.27%), compared with last month's 4 (13.72%) and the prior month's 27 (19.56%). In addition, 31 issues gained at least 25% (32.89%), as none did so last month. On the downside, 45 issues declined an average of 6.10%, down from last month's 362 issues (-11.55%) and the prior month's 291 issues (-7.66%). Declines of at least 10% were posted by 8 issues (-16.46%), compared with 200 issues (-16.30%) last month and 81 (-15.63%) the month before that; no issues fell at least 25%, while 17 (-32.73%) did so last month. For the three-month period, breadth improved but remained negative, as 151 issues gained (12.45%), compared with 150 (12.38%) last month, and 240 declined (-13.67%), down from the prior month's 251 (-13.25); 75 gained at least 10% (21.35%), up from last month's 63 (23.36%), and 132 declined at least 10% (-20.60%), down from 144 (-19.49%) last month. Year-to-date, breadth improved but remained negative, as 111 issues gained (24.09%), compared with 56 (20.82%) last month, and 288 declined (-25.44%), down from the prior month's 343 (-28.16%); 73 gained at least 10% (34.04%), up from last month's 34 (31.40%), and 229 declined at least 10% (-30.56%), down from 290 (-32.34%) last month. For 2021, 316 issues gained (39.19%) and 80 declined (-15.27%); 270 gained at least 10% (44.91%) and 44 declined at least 10% (23.70%). Gains of at least 25% were posted by 178 issues, as 15 issues declined at least 25%.

S&P SmallCap 600

The S&P 600® reversed course in October and received significant media coverage (even though The Dow did better), while investors pondered growth. For October, the S&P SmallCap 600 added 12.27%, after September's decline of 10.05% and August's 4.51% fall. For the three-month period, the index fell 3.58%, and the YTD return was -14.71%. For the one-year period, the small-cap index did the worst, down 13.14%, while the two-year period was up 36.39%. The 3-year period was up 23.85%, the 5-year period was up 31.09% and the 10-year period was up 160.96% (annualized with dividends, the 3-, 5- and 10-year returns were 8.96%, 8.11% and 11.61%, respectively). Over the longer-term 20-year period, the small-cap index's total return was 10.89% annualized (the S&P 500 was 9.81%), the best of any headline index (even as its dividend payments were the lowest).

Sector variance (best-to-worst sector) increased to 23.61% from last month's 8.24% and August's 7.85%, as the three-month spread increased to 20.82% from 12.83% last month, with the YTD spread increasing to 85.38% from 58.68% last month (the 2021 spread was 53.47%, down from 2020's 71.71%), as Energy's outperformance contrasted Real Estate's poor performance. For October, all 11 sectors gained, compared with none in September and 1 in August. Energy continued to do the best, as it posted a 28.11% monthly gain and was up 55.58% YTD, while Materials was a distant second, adding 15.38% but down 3.57% YTD. Consumer groups did well for the month, as Consumer Discretionary was up 11.91% (but down 27.83% YTD), and Consumer Staples gained 11.80% (and was down 5.87% YTD). Information Technology gained 10.07%, but remained down 21.10% YTD, as Health Care did the worst, gaining 4.49% and down 23.46% YTD.

For the month, breadth increased and turned strongly positive, as 526 issues gained an average of 16.21% each, up from last month's 41 issues (4.29%) and the prior month's 176 issues (8.65%). On the downside, 75 issues declined an average of 8.48% each, down from 559 issues (-12.48%) last month and the prior month's 422 (-9.81%). There were 368 issues that gained at least 10% (20.82%), up from last month's 5 issues (11.96%) and the prior month's 47 (21.25%), while 25 issues declined at least 10% (-17.52%), down from 317 issues (-17.47%) last month and 156 (-17.51%) the month before that. Eighty-five issues posted significant gains of at least 25% (34.61%), compared with none last month, while 3 issues lost at least 25% (-35.62%), compared with 40 last month (-31.13%). For the three-month period, 237 issues were up (13.54%), up from last month's 205 (12.05%), as 363 were down (-15.43%), compared with 396 (-16.09%) last month. Gains of at least 10% for the three-month period numbered 128 (20.87%), up from last month's 88 (21.62%), as 223 declined at least 10% (-22.02%), down from 254 (-21.97%) last month. Gains of at least 25% were reported by 34 issues (34.59%), up from 20 (42.48%) last month, as 69 declined at least 25% (-34.09%), down from 75 (-33.85%) last month. Year-to-date, 168 issues were up (24.92%), up from last month's 82 (23.15%), while 429 were down (-29.10%), compared with

515 (-31.54%) last month. Gains of at least 10% numbered 103 (37.53%), up from last month's 49 (35.87%), as 356 declined at least 10% (-33.97%), down from 460 (-34.66%) last month. Gains of at least 25% were reported by 55 issues (56.49%), up from 22 (59.29%) last month, as 225 declined at least 25% (-43.91%), down from 312 (-42.80%) last month. For 2021, breadth was positive, as 443 issues gained (48.77%) and 151 were down (-19.77%). Gains of at least 10% for the period numbered 377 (56.31%), while 95 declined at least 10% (-28.39%). Gains of at least 25% were reported by 282 issues, as 47 declined at least 25% (-40.12%).

S&P Global BMI

Global markets followed U.S. equities in reversing course in October, as central banks raised interest rates and earnings beat estimates (not good, but better than expected). The S&P Global BMI increased 5.93% in October, after September's broad 9.85% decline (its worst month since March 2020's -14.61%), and it was up 2.84% absent the U.S.'s 8.07% gain, after being down 10.45% absent the U.S.'s decline of 9.45% in September; August declined 3.63%, which was -3.19% absent the U.S.'s -3.94%, and July posted a 6.89% gain, when it was up 3.57% without the U.S.'s 9.28% gain. For the three-month period, global markets were down 7.98% (-7.14% last month) and down 10.84% (-10.21%) without the U.S.'s 6.00% loss (-4.94%), as the YTD return was down 22.61% (-26.95%) and down 26.63% (-28.66%) without the U.S.'s 19.74% decline (-17.98%), with the one-year return down 22.01% (-22.95%) and down 27.38% (-27.96%) without the U.S.'s 18.07% decline (-19.15%). Longer term, the U.S. dominated, as the two-year global return was up 6.04% with the U.S.'s gain of 16.58% and down 7.00% without it, while the three-year return was up 8.61% with the U.S.'s gain of 25.87% and down 10.60% without it. From the U.S. presidential election on Nov. 3, 2020, it was up 2.83%, and absent the 8.07% U.S. gain, it was down 9.74%.

For October 2022, the S&P Global BMI increased USD 3.514 trillion (down USD 6.186 trillion last month). Non-U.S. markets increased USD 0.713 trillion (down USD 2.463 trillion), and the U.S. market increased USD 2.801 trillion (down USD 3.723 trillion). Sector variance increased, as 10 of the 11 sectors gained, compared with none gaining last month and 1 gaining the month before that. The October spread between the best (Energy, 17.68%) and worst (Communication Services, -0.73%) sectors was 17.68%, up from last month's 8.29% and August's 7.38%. The YTD spread was 67.92%, up from last month's 48.00% (Energy was up 29.58% and Communication Services was down 38.34%).

Emerging markets remained in the red, as they declined 3.61% in October, after September's broad 10.44% decline, August's 1.02% gain and July's -1.05%, as they posted losses of 12.79% and 28.79% for the three-month period and YTD, respectively. The one-year return was -30.39%, the two-year return was -18.87% and the three-year return was -15.44%. Of the 24 markets, 20 posted gains in October, compared with all 24 gaining in September (12 gained

in August and 17 gained in July). Turkey did the best, gaining 23.21% for the month, was up 49.37% YTD and up 31.15% for the one-year period. Poland was next, adding 14.34% for the month, it was down 41.94% YTD and down 46.14% for the one-year period, followed by Hungary, which was up 13.91% for the month, down 43.96% YTD and down 50.49% for the one-year period. China did the worst, falling 14.86%, as it was down 42.22% YTD and down 46.63% for the one-year period. Taiwan was next, posting a monthly decline of 5.05%, down 39.37% YTD and down 34.32% for the one-year period, followed by Egypt, which was down 3.99% for the month, down 37.83% YTD and down 35.28% for the one-year period.

Developed markets increased for the month, as they posted a consolidated 7.12% gain after September's 9.79% decline, August's -4.16% and July's 7.88%; excluding the U.S., developed markets returned 5.25% for October, compared with -10.46% for September, August's -4.61% and July's 5.23%. The three-month loss was 7.39% and was -10.11% without the U.S., as the YTD return was -21.85% and -25.83% excluding the U.S, while the one-year return was -20.95% and -26.27% excluding the U.S. The two-year return was 9.61% and -2.37% excluding the U.S., and the three-year return was up 11.99% and down 8.75% excluding the U.S. For October, 23 of the 25 markets gained, up from September, when none gained, and compared with August's 1. Norway did the best, adding 11.20% for October, it was down 18.54% YTD and down 21.44% for the one-year period. Italy was next, up 10.49%, down 28.60% YTD and down 28.70% for the one-year period, followed by Ireland, which was up 10.48% for the month, down 31.56% YTD and down 32.05% for the one-year period. Hong Kong did the worst, falling 11.96% for the month, down 32.69% YTD and down 35.89% for the one-year period. Singapore was next, down 0.04% for the month, down 22.76% YTD and down 31.41% for the one-year period, as Japan followed, up 2.26% for the month, down 25.23% YTD and down 26.38% for the one-year period. Of note, Germany was up 9.11% for the month, down 34.53% YTD and down 35.60% for the one-year period. The U.K. was up 6.21% for the month, down 20.83% YTD and down 20.25% for the one-year period. Canada was up 6.20% for the month, down 15.34% YTD and down 16.51% for the one-year period.

Performance Recap

Exhibit 2: Monthly Returns

S&P 500	Price	1-Month (%)	3-Month (%)	YTD (%)	1-Year (%)	5-Year (%)	10-Year (%)
Energy	689.83	24.84	15.21	63.18	58.15	37.12	27.76
Materials	466.12	8.97	-5.13	-18.17	-12.78	26.08	104.76
Industrials	797.71	13.86	-1.31	-10.87	-9.69	31.79	151.46
Consumer Discretionary	1124.52	0.20	-12.25	-30.19	-29.08	53.63	208.74
Consumer Staples	757.25	8.83	-2.10	-5.88	2.18	38.55	107.49
Health Care	1546.64	9.59	0.31	-5.92	-0.81	64.83	233.83
Financials	563.91	11.80	0.69	-13.25	-15.72	27.82	163.66
Information Technology	2241.13	7.75	-11.16	-26.65	-21.00	104.43	386.31
Communication Services	161.86	-0.09	-12.24	-28.01	-30.01	29.88	29.28
Utilities	339.18	2.00	-9.71	-6.74	-0.20	21.42	80.95
Real Estate	230.25	1.91	-17.02	-29.10	-22.95	14.81	56.18
S&P 500	3871.98	7.99	-6.25	-18.76	-15.92	50.35	174.19
Dow Jones Industrial Average	Price	1-Month (%)	3-Month (%)	YTD (%)	1-Year (%)	5-Year (%)	10-Year (%)
Dow Jones Industrial Average	32732.95	13.95	-0.34	-9.92	-8.62	40.02	149.94
S&P MidCap 400	Price	1-Month (%)	3-Month (%)	YTD (%)	1-Year (%)	5-Year (%)	10-Year (%)
Energy	364.58	22.15	10.45	48.55	42.30	-1.84	-44.15
Materials	599.43	13.82	-5.16	-10.23	-5.71	20.24	116.76
Industrials	1450.43	11.50	-0.87	-13.14	-10.36	48.98	219.83
Consumer Discretionary	1010.51	11.75	-4.60	-23.53	-23.63	36.77	128.39
Consumer Staples	2287.69	12.86	3.96	-0.18	3.60	40.53	200.06
Health Care	2417.42	6.21	-6.41	-19.41	-19.77	52.80	308.33
Financials	1258.16	13.40	7.15	-1.86	-1.11	29.41	148.76
Information Technology	3652.40	6.29	-8.65	-23.00	-23.22	58.79	250.11
Communication Services	137.21	6.29	-6.83	-19.32	-24.18	-16.20	-30.07
Utilities	547.00	6.49	-10.22	-6.99	-0.63	0.97	73.52
Real Estate	195.17	5.35	-14.09	-27.38	-22.63	2.14	-
S&P MidCap 400	2433.05	10.42	-3.17	-14.39	-12.92	32.58	148.16
S&P SmallCap 600	Price	1-Month (%)	3-Month (%)	YTD (%)	1-Year (%)	5-Year (%)	10-Year (%)
Energy	401.69	28.11	9.29	55.58	33.98	-22.72	-65.71
Materials	660.10	15.38	3.37	-3.57	-1.41	27.73	116.87
Industrials	1487.65	15.62	-1.55	-9.32	-5.01	45.59	200.85
Consumer Discretionary	741.33	11.91	-4.50	-27.83	-27.04	45.22	153.15
Consumer Staples	2471.17	11.80	0.99	-5.87	1.35	44.40	191.95
Health Care	3306.94	4.49	-8.74	-23.46	-24.91	50.90	313.55
Financials	1074.08	11.97	-1.22	-12.12	-11.88	4.46	97.00
Information Technology	1068.23	10.07	-7.06	-21.10	-14.96	51.00	317.43
Communication Services	3.18	10.03	-9.40	-26.22	-28.05	5.30	32.81
Utilities	1124.43	11.29	-1.76	-4.96	6.65	13.90	125.03
Real Estate	157.34	11.84	-11.54	-29.80	-28.21	-12.72	-
S&P SmallCap 600	1195.57	12.27	-3.58	-14.71	-13.14	31.09	160.96

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes. Returns shown are price returns.

Exhibit 3: Total Returns

Index	1-Month (%)	3-Month (%)	YTD (%)	1-Year (%)	3-Year (%)	10-Year (%)
S&P 500	8.10	-5.86	-17.70	-14.61	33.88	233.08
S&P MidCap 400	10.52	-2.76	-13.27	-11.54	30.20	189.99
S&P SmallCap 600	12.37	-3.18	-13.66	-11.81	29.34	199.92
S&P Composite 1500	8.34	-5.62	-17.36	-14.37	33.54	229.35
Dow Jones Industrial Average	14.07	0.20	-8.42	-6.74	28.88	215.80

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2022. Index performance based on total return in USD. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 4: S&P Global BMI, Emerging, Sorted by October Performance

BMI Member	1-Month (%)	3-Month (%)	YTD (%)	1-Year (%)	2-Year (%)	3-Year (%)
Global	5.93	-7.98	-22.61	-22.01	6.04	8.61
Global Ex-U.S.	2.84	-10.84	-26.63	-27.38	-7.00	-10.60
Emerging	-3.61	-12.79	-28.79	-30.39	-18.87	-15.44
Turkey	23.21	45.12	49.37	31.15	54.84	14.75
Poland	14.34	-12.45	-41.94	-46.14	-8.49	-38.35
Hungary	13.91	-5.36	-43.96	-50.49	-13.62	-40.65
Mexico	13.03	6.18	-3.01	0.86	44.50	11.10
Peru	11.93	8.66	-0.13	-1.70	1.98	-26.88
Greece	11.60	-2.80	-12.33	-14.34	43.90	-13.36
Brazil	8.73	7.49	5.74	4.49	10.39	-31.06
Philippines	7.64	-8.17	-24.27	-24.86	-16.34	-30.95
Kuwait	5.17	-5.64	3.64	3.25	35.48	29.31
Colombia	4.63	-13.34	-20.76	-24.86	-3.23	-42.18
U.A.E.	3.33	-3.17	-2.68	6.06	57.38	27.36
South Africa	2.71	-10.94	-17.96	-18.37	6.00	-12.01
Saudi Arabia	2.60	-2.89	1.94	-2.51	47.42	49.84
Chile	2.37	-5.92	9.77	9.01	14.99	-20.56
Pakistan	2.20	7.88	-30.21	-34.94	-35.48	-35.37
India	1.92	0.22	-8.79	-7.94	43.75	39.42
Malaysia	1.47	-8.59	-19.62	-21.73	-16.06	-21.43
Czech Republic	0.73	-17.69	-21.83	-12.48	51.07	13.10
Thailand	0.42	-1.63	-13.94	-12.66	12.39	-20.52
Indonesia	-1.49	-0.08	0.24	-1.98	21.80	-8.74
Qatar	-1.80	-4.85	2.33	0.80	21.30	14.22
Egypt	-3.99	-3.83	-37.83	-35.28	-28.80	-46.32
Taiwan	-5.05	-19.70	-39.37	-34.32	-8.66	8.35
China	-14.76	-26.91	-42.22	-46.63	-51.18	-35.73

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes. Returns shown are price returns.

Exhibit 5: S&P Global BMI, Developed, Sorted by October Performance

BMI Member	1-Month (%)	3-Month (%)	YTD (%)	1-Year (%)	2-Year (%)	3-Year (%)
Developed	7.12	-7.39	-21.85	-20.95	9.61	11.99
Developed Ex-U.S.	5.25	-10.11	-25.83	-26.27	-2.37	-8.75
Norway	11.20	-11.75	-18.54	-21.44	25.04	4.12
Italy	10.49	-2.79	-28.60	-28.70	7.11	-11.99
Ireland	10.48	-5.25	-31.56	-32.05	-8.26	-5.57
Austria	9.92	-7.03	-35.25	-34.93	7.77	-23.79
France	9.68	-6.38	-24.47	-22.75	11.82	-5.95
Denmark	9.66	-10.97	-22.70	-23.95	5.34	38.29
Germany	9.11	-7.72	-34.53	-35.60	-15.40	-22.08
Spain	8.79	-5.32	-20.32	-24.31	4.00	-24.22
United States	8.07	-6.00	-19.74	-18.07	16.56	25.87
Luxembourg	7.52	-9.77	-34.57	-38.78	2.28	-12.96
Korea	7.01	-15.65	-36.88	-36.62	-21.08	-9.67
Belgium	6.82	-9.40	-28.65	-30.30	-8.02	-29.53
Sweden	6.38	-15.52	-41.09	-41.31	-16.34	-3.71
U.K.	6.21	-10.94	-20.83	-20.25	10.97	-14.82
Canada	6.20	-7.18	-15.34	-16.51	22.20	14.21
Finland	6.01	-7.69	-28.50	-27.65	-5.88	-1.63
Israel	5.88	-4.07	-23.09	-21.07	11.73	12.55
New Zealand	5.60	-10.78	-31.16	-35.53	-27.26	-14.37
Portugal	5.33	-11.07	-13.03	-16.81	10.06	-5.74
Netherlands	5.07	-15.08	-37.06	-38.86	-2.43	7.74
Australia	5.07	-9.69	-20.03	-21.74	6.28	-2.94
Switzerland	3.22	-9.11	-25.48	-21.28	0.14	1.69
Japan	2.26	-10.63	-25.23	-26.38	-14.34	-16.31
Singapore	-0.04	-8.71	-22.76	-31.41	2.58	-8.68
Hong Kong	-11.96	-25.32	-32.69	-35.89	-27.12	-32.91

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes. Returns shown are price returns.

Exhibit 6: Price-to-Earnings Ratios

Index	2019	2020	2021	Estimated 2022
S&P 500	20.56	30.69	18.60	18.95
S&P 500 Consumer Discretionary	24.98	46.04	24.82	30.47
S&P 500 Consumer Staples	21.21	21.72	21.56	22.77
S&P 500 Energy	28.36	-10.37	22.19	8.64
S&P 500 Financials	11.77	15.01	9.52	16.14
S&P 500 Health Care	21.36	22.86	19.81	18.79
S&P 500 Industrials	19.38	55.14	25.02	20.06
S&P 500 Information Technology	25.60	33.80	23.97	22.81
S&P 500 Materials	22.64	28.72	15.27	13.59
S&P 500 Communication Services	22.03	30.57	15.48	18.08
S&P 500 Utilities	20.97	20.46	22.20	20.58
S&P 500 Real Estate	34.33	43.17	28.75	30.54
Index	2019	2020	2021	Estimated 2022
S&P MidCap 400	21.72	31.10	15.82	14.05
S&P 400 Consumer Discretionary	20.91	30.38	10.64	11.20
S&P 400 Consumer Staples	22.96	22.04	19.30	17.83
S&P 400 Energy	-119.57	-6.25	-36458.00	12.02
S&P 400 Financials	12.58	14.37	11.15	12.10
S&P 400 Health Care	25.10	35.70	28.61	25.55
S&P 400 Industrials	21.91	35.02	20.54	15.48
S&P 400 Information Technology	35.91	50.18	25.40	20.02
S&P 400 Materials	17.45	24.55	7.05	7.38
S&P 400 Communication Services	23.38	63.53	29.76	19.74
S&P 400 Utilities	22.90	16.81	15.29	15.08
S&P 400 Real Estate	30.44	66.10	25.22	19.50
Index	2019	2020	2021	Estimated 2022
S&P SmallCap 600	33.29	-280.36	16.10	14.55
S&P 600 Consumer Discretionary	17.52	30.33	7.79	8.37
S&P 600 Consumer Staples	27.06	19.37	20.80	18.21
S&P 600 Energy	-4.61	-0.97	92.34	9.35
S&P 600 Financials	14.58	25.69	9.81	12.18
S&P 600 Health Care	284.78	160.03	40.24	62.87
S&P 600 Industrials	20.05	34.11	16.57	11.96
S&P 600 Information Technology	54.99	61.15	29.30	21.84
S&P 600 Materials	22.69	46.89	18.94	12.35
S&P 600 Communication Services	1071.39	-2171.53	28.91	28.91
S&P 600 Utilities	29.67	25.47	25.00	26.43
S&P 600 Real Estate	34.23	1416.00	30.97	30.43

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 7: Operating EPS Changes

Index	Q3 2021 over Q3 2020 (%)	Q4 2021 over Q4 2020 (%)	Q1 2022 over Q1 2021 (%)	Q2 2022 over Q2 2021 (%)	Q3 2022E over Q3 2021 (%)	2021 over 2020 (%)	2022E over 2021 (%)
S&P 500	37.26	48.59	4.11	-9.95	0.79	70.15	-1.87
S&P 500 Consumer Discretionary	-10.78	53.33	-41.01	-22.16	5.70	60.13	-18.54
S&P 500 Consumer Staples	-0.43	19.95	6.75	-8.94	-14.93	9.54	-5.32
S&P 500 Energy	675.76	246.78	324.40	347.48	121.47	212.69	156.67
S&P 500 Financials	6.48	11.61	-27.16	-78.33	-20.67	81.39	-41.04
S&P 500 Health Care	41.28	38.07	7.65	5.85	-6.59	34.80	5.40
S&P 500 Industrials	93.72	181.13	33.62	21.45	16.20	134.58	24.75
S&P 500 Information Technology	44.92	18.69	16.99	-4.07	1.53	37.93	5.09
S&P 500 Materials	109.11	54.39	55.31	15.35	-4.36	92.31	12.39
S&P 500 Communication Services	56.92	54.19	-10.00	-17.46	-15.69	71.35	-14.39
S&P 500 Utilities	-2.46	-21.88	-1.30	-0.32	10.29	-2.05	7.85
S&P 500 Real Estate	107.14	58.00	37.58	-10.85	-2.46	51.99	-5.87
Index	Q3 2021 over Q3 2020 (%)	Q4 2021 over Q4 2020 (%)	Q1 2022 over Q1 2021 (%)	Q2 2022 over Q2 2021 (%)	Q3 2022E over Q3 2021 (%)	2021 over 2020 (%)	2022E over 2021 (%)
S&P MidCap 400	93.10	59.40	19.72	26.46	12.09	107.42	12.53
S&P 400 Consumer Discretionary	49.76	60.18	4.33	-7.40	-1.98	176.76	-4.98
S&P 400 Consumer Staples	5.44	-12.41	7.55	7.88	4.68	24.49	8.23
S&P 400 Energy	-10.45	348.22	-1021.51	474.15	232.92	99.96	303400.00
S&P 400 Financials	96.67	31.47	-8.05	-11.99	0.17	64.93	-7.91
S&P 400 Health Care	12.95	-1.94	32.40	4.66	0.32	11.86	11.94
S&P 400 Industrials	75.31	66.26	52.62	41.28	20.24	88.62	32.73
S&P 400 Information Technology	61.88	43.59	30.58	9.40	30.60	72.29	26.91
S&P 400 Materials	373.52	218.31	110.23	28.66	-40.58	307.33	-4.54
S&P 400 Communication Services	12.20	2480.00	356.25	105.66	36.23	65.23	50.76
S&P 400 Utilities	68.10	-32.40	31.54	-20.56	-42.21	18.56	1.37
S&P 400 Real Estate	775.00	173.74	116.41	47.88	13.33	149.68	29.33
Index	Q3 2021 over Q3 2020 (%)	Q4 2021 over Q4 2020 (%)	Q1 2022 over Q1 2021 (%)	Q2 2022 over Q2 2021 (%)	Q3 2022E over Q3 2021 (%)	2021 over 2020 (%)	2022E over 2021 (%)
S&P SmallCap 600	99.77	96.80	-2.26	35.19	27.56	1960.90	10.67
S&P 600 Consumer Discretionary	87.25	41.88	15.24	-5.28	-25.15	283.87	-6.97
S&P 600 Consumer Staples	12.56	-13.75	-3.52	2.38	21.59	11.22	14.22
S&P 600 Energy	59.25	378.44	-348.30	436.65	312.53	102.59	887.13
S&P 600 Financials	4.68	-13.27	-19.05	-37.79	-19.36	185.75	-19.48
S&P 600 Health Care	40.17	41.03	52.00	-94.11	-32.82	221.93	-36.00
S&P 600 Industrials	103.08	105.77	119.37	44.14	32.12	133.23	38.54
S&P 600 Information Technology	40.63	44.72	-9.83	-11.95	65.40	108.34	34.15
S&P 600 Materials	104.38	116.09	106.36	97.17	6.23	180.45	53.30
S&P 600 Communication Services	200.00	0.00	300.00	-80.00	0.00	-	0.00
S&P 600 Utilities	-39.95	-9.99	-8.78	-14.99	-9.11	18.65	-5.40
S&P 600 Real Estate	62.50	214.29	279.31	37.65	25.38	3807.69	1.77

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 8: Breadth of Change (Issues with Monthly Price Changes as Described by Type)

S&P 500						
Type	October 2022	Average % Change	3-Month	Average % Change	YTD	Average % Change
Up	426	12.22	185	10.24	122	24.91
Down	76	-5.30	316	-12.56	379	-24.91
Up >= 10	241	17.21	71	19.69	83	34.45
Down <= -10	7	-21.65	173	-18.70	315	-28.87
Up >= 25	26	32.86	14	34.33	39	54.16
Down <= -25	3	-32.50	27	-33.70	171	-38.21
Up >= 50	0	0.00	0	0.00	18	74.59
Down <= -50	0	0.00	1	-56.80	23	-57.38
S&P MidCap 400						
Type	October 2022	Average % Change	3-Month	Average % Change	YTD	Average % Change
Up	356	13.49	161	12.45	111	24.09
Down	45	-6.10	240	-13.67	288	-25.44
Up >= 10	227	18.27	75	21.35	73	34.04
Down <= -10	8	-16.46	132	-20.60	229	-30.56
Up >= 25	31	32.89	21	33.53	32	56.27
Down <= -25	0	0.00	30	-35.01	136	-39.65
Up >= 50	1	59.28	0	0.00	17	75.90
Down <= -50	0	0.00	3	-57.15	27	-60.21
S&P SmallCap 600						
Type	October 2022	Average % Change	3-Month	Average % Change	YTD	Average % Change
Up	526	16.21	237	13.54	168	24.92
Down	75	-8.48	363	-15.43	429	-29.10
Up >= 10	368	20.82	128	20.87	103	37.53
Down <= -10	25	-17.52	223	-22.02	356	-33.97
Up >= 25	85	34.61	34	34.59	55	56.49
Down <= -25	3	-35.62	69	-34.09	225	-43.91
Up >= 50	7	66.13	1	73.27	18	99.21
Down <= -50	0	0.00	4	-53.00	72	-60.94
Dow Jones Industrial Average						
Type	October 2022	Average % Change	3-Month	Average % Change	YTD	Average % Change
Up	28	14.66	14	6.92	10	14.75
Down	2	-0.96	16	-9.70	20	-22.88
Up >= 10	21	17.01	3	13.32	5	26.97
Down <= -10	0	0.00	8	-15.50	15	-28.69
Up >= 25	2	28.91	0	0.00	2	43.10
Down <= -25	0	0.00	0	0.00	11	-32.81
Up >= 50	0	0.00	0	0.00	1	54.15
Down <= -50	0	0.00	0	0.00	0	0.00

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

GENERAL DISCLAIMER

© 2022 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, LCDX, MBX, MCDX, PRIMEX, TABX, HHPI, IRXX, I-SYND, SOVX, CRITS, CRITR are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, S&P Global, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P Dow Jones Indices is not an investment adviser, commodity trading advisor, commodity pool operator, broker dealer, fiduciary, promoter" (as defined in the Investment Company Act of 1940, as amended), "expert" as enumerated within 15 U.S.C. § 77k(a) or tax advisor. Inclusion of a security, commodity, crypto currency or other asset within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, commodity, crypto currency or other asset, nor is it considered to be investment advice or commodity trading advice. Closing prices for S&P Dow Jones Indices' US benchmark indices are calculated by S&P Dow Jones Indices based on the closing price of the individual constituents of the index as set by their primary exchange. Closing prices are received by S&P Dow Jones Indices from one of its third party vendors and verified by comparing them with prices from an alternative vendor. The vendors receive the closing price from the primary exchanges. Real-time intraday prices are calculated similarly without a second verification.

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

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

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

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

Cboe and VIX are registered trademarks of Cboe Exchange, Inc. and have been licensed for use by S&P Dow Jones Indices.