STATE STREET GLOBAL SPDR®

September 29, 2023 US-Listed ETF Flash Flows

Rising Rates Rain on Returns

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- Macro headlines sent both stocks and bonds lower for the month and quarter, raising their cross-asset rolling 90-day correlation to the upper 80th percentile.
- Sentiment remained sour in September. ETF inflows were only \$38 billion, 32% below historical averages.
- Investors dialed back equity risk. Emerging markets, Europe-region, and singlecountry funds all had outflows. Sectors also posted \$7 billion of outflows.
- Bonds' \$10 billion of inflows showed a defensive mindset. Government exposures took in \$9 billion while credit sectors saw \$5.2 billion in outflows.

Flash Thoughts

The state of Massachusetts saw 3.5 inches of rain in September — our fourth month in a row with above average rainfall following what was the rainiest summer since 1995.

Just as the above average summer rainfall in the Northeast has ruined pumpkin crops and dampened typical fall festivities, rising rates have rained on bond and stock returns over the past few weeks.

Higher-for-longer rates have permeated capital markets, well beyond bonds and transformed stock rallies into a downpour of drawdowns. Core bonds fell -2.5% in September — their fifth month of losses in a row.² The weakness in bond returns has pushed the Bloomberg US Aggregate Bond Index (Agg) into a loss for the year. The Agg's down -1.2% through nine months,³ so we may see a record third consecutive annual loss for the heritage core bond benchmark.

The rise in real rates has also pressured stock valuations, particularly in the well-owned and much-hyped longer duration equity markets, like Tech and broader growth stocks. US equities, as a result, ended September at near oversold levels based on 14-day RSI and only 16% of stocks are now trading above their 50-day moving average.⁴

The dual sell-off in stocks and bonds has sent their cross-asset correlations higher, negating any perceived long-term diversification benefits in the near term. As of right now, their rolling 90-day correlation of daily returns sits in the 85th percentile over the past 35 years — spiking sharply from the 13th percentile at the start of June, when rates rose and the rain started to fall.⁵

Although stocks have sold off alongside bonds, higher rates have not rained on earnings sentiment. Earnings revisions are holding up amid the cloudy macro backdrop. Entering the third quarter earnings season, expectations are 0.3% above the estimate at the end of June. But it's not all sunshine in terms of fundamentals. Growth is still expected to be negative at -0.1%.⁶

Yet, if surprise trends hold from past quarters (80% of firms surprised to the upside in Q2), Q3 earnings figures could end up being positive. If earnings resilience is indeed a trend coming out of Q3, it could help markets to stabilize/bounce from current oversold levels. After all, stocks didn't start materially declining until they entered the macro rainstorm post Jackson Hole in mid-August — after 95% of firms had reported Q2 earnings and offered some fundamental signals for investors to home in on.

The risk is that the upgrades to Q3 estimates have set the bar too high. Typically, analysts reduce next quarter's earnings estimates during the first two months of a quarter. During the past ten years, the average decline in the bottom-up EPS estimate during the first two months of a quarter has been -2.7% — not a +0.3% upgrade like we saw recently.8

If firms can't beat the increased expectations, losses could accumulate and sentiment could be reined in. Firms that missed earnings in Q2 witnessed a -2.6% decline over the next two days, compared to the average -2.2% decline historically. With the majority of firms reporting in October, the ability for earnings resiliency to support stock returns will be a major theme over the next few weeks.

If the bar is indeed too high and firms disappoint, October price trends could be the same as what we saw in September. And investors will head deeper into the fall like Guns N' Roses' Axel Rose — walking in the cold November Rain.

The opportunities in bonds are a bit more balanced. With rates moving higher, core bond yields are now more in line with their duration, as the yield-per-unit of duration is 0.90.¹⁰ This more balanced breakeven ratio is now above its long-term average for the first time since 2009. That means core bonds' coupon/yield can help them withstand further upward movements in rates without immediately incurring a total return loss from duration-induced price declines.

If fundamental durability can't be an umbrella to the macro rainstorms that have plagued capital markets since mid-August, how can investors stay dry?

One tactic may be <u>structuring portfolios to remain invested with lower market risks</u>. This means considering:

- 1) Equity strategies with an imbedded factor bias toward Low Volatility but with sufficient upside capture due to a mix of return-seeking factors like Quality and Value.
- 2) Active core bond mandates, both in the core and at the shorter end of the curve, that can seek out attractive income opportunities while balancing macro risks.

The Big Flow Picture

Global stocks and bonds fell in unison on the month and quarter, and the lackluster buying behavior so far this year went unchanged in September.

ETFs' \$38 billion of inflows were roughly 32% below the historical average monthly total (+\$56 billion). This marks the eighth month out of nine this year when monthly net flows were below average — showing investors' restraint and lack of conviction in current market return trends.

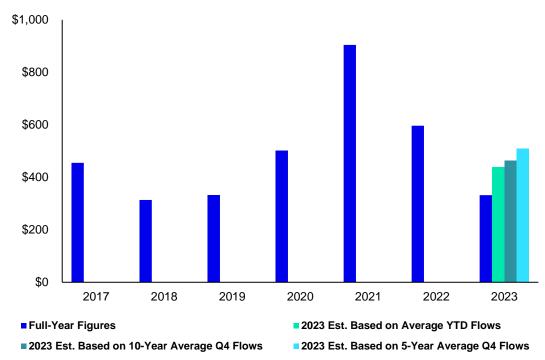
The below average ETF flows in September, alongside the consistent weakness in earlier months, pushed full-year totals further off the pace needed to surpass \$500 billion this year — a milestone reached each of the last three years.

Based on 2023 average monthly flow totals (+\$36 billion), ETFs are projected to take in \$441 billion this year. If the 10-year average historical fourth quarter flows are used in the projection (+\$131 billion), full-year flows could be as high as \$462 billion.

If we use the more recent 5-year fourth quarter average flows, the projection does eclipse \$500 billion, as shown below. But that average includes the record-setting \$270 billion taken in during the fourth quarter of 2021 — more than 80% of the total taken in during the first nine months of 2023!

Figure 1

2023 Projected Flow
Figures
(\$ Billion)



Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. Past performance is not a reliable indicator of future performance.

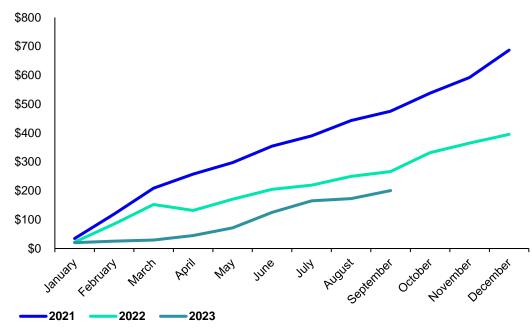
Bonds and Stocks Post Inflows, But Are Below Pace Equity ETFs took in nearly \$30 billion in September, accounting for over 78% of all fund flows last month. But equity ETF flows were still below their historic monthly average of \$40 billion.

Equity ETFs have averaged just \$22 billion a month this year and only recently surpassed \$200 billion of inflows, a level reached much sooner in the prior two years, as shown below.

Figure 2

Cumulative Equity ETF

Flows
(\$ Billions)



Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. **Past performance is not a reliable indicator of future performance.**

Bond ETFs added almost \$10 billion last month, well below their historical monthly average of \$17 billion. For the full year to date, bond ETFs are averaging \$16 billion a month — a pace that would project full-year figures to be close to breaching the \$200 billion barrier.

But with below-average inflows each of the past two months, full-year flows may not surpass \$180 billion. The same goes for the chance that total ETF assets will break \$1.5 trillion, as they're now \$95 billion shy. Below-average flow totals combined with recent market declines resulting from higher rates have made that numerical bar harder to jump by year end.

Nonetheless, the \$137 billion that bond ETFs have amassed so far this year represents a near 10% increase in assets from flows alone. This is much higher than the 4% of start-of-year flows registered by equity ETFs. Given the disparity, fixed income funds have been able to take market share away from equity funds within the ETF industry — a sign of increased secular usage.

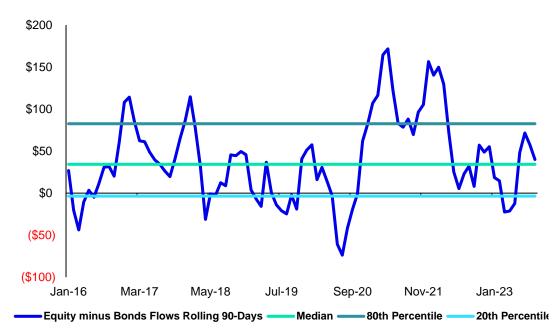
This disparity also shows itself in sentiment. When comparing rolling 90-day flow differentials between equity and bond ETFs, it's clear that investors are hesitant to express risk. After having moved higher at the start of the summer, the rolling 90-day average sagged and is now at the long-term median, as shown below.

Figure 3

Rolling 90-Day

Difference Between

Equity and Bond Flows
(\$ Billions)



Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. **Past performance is not a reliable indicator of future performance.**

Commodity flows didn't help the headline number in September either, as they posted outflows once again this month. They now have almost \$7 billion of outflows this year.

September flows were dragged down by the \$2 billion of outflows in precious metal exposures, namely gold-related ETFs. Broad commodity funds offset that weakness with \$330 million of inflows — ending a record run of 12 consecutive months of outflows.

Figure 4
Asset Class Flows

In Millions (\$)	September	Year to Date	Trailing 3 Mth	Trailing 12 Mth	Year to Date (% of AUM)
Equity	29,757	201,347	84,294	331,786	4.00%
Fixed Income	9,843	137,915	39,158	212,929	10.61%
Commodity	odity -1,650		-7,137	-12,285	-5.19%
Specialty	229	-37	784	-428	-0.73%
Mixed Allocation	-96	-2,064	-81	-922	-10.70%
Alternative	311	1,025	818	1,456	18.59%

Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. Top two/bottom two categories per period are highlighted. **Past performance is not a reliable indicator of future performance.**

USA All Day

US-focused exposures' \$29 billion represented 96% of all equity inflows by geography last month, as investors had an extreme preference to allocate to US equities over the rest of the world.

Given that US markets are up double digits and non-US stocks are not (12% versus 4.5%),¹¹ return trend chasing is one potential rationale for the outsized directional buying behavior. And unlike the above commentary on below average headline flow figures, US ETFs' \$29 billion is actually above their historical average rate of \$27 billion — meaning the rest of the equity world didn't contribute.

International-Developed exposures were the only other region with meaningful inflows. They took in more than \$3 billion in September, extending their record inflow run to 39 consecutive months, a time period where \$218 billion was accumulated.

Beyond the focus on broad developed exposures, there was little interest to venture overseas and express specific directional risk bets. Emerging market (EM) ETFs had over \$1 billion of outflows for the second month in a row. Similarly, outflows in single-country China and Germany ETFs led that category to post nearly \$1 billion of outflows.

Germany wasn't the only European country to witness outflows. Single-country funds focused on European nations had total outflows of \$432 million and broader European regional funds had \$1.1 billion of outflows. These flow trends were supported by fading price momentum, both absolute and relative to the US.

Figure 5 **Geographic Flows**

In Millions (\$)	September	Year to Date	Trailing 3 Mth	Trailing 12 Mth	Year to Date (% of AUM)
U.S.	28,715	140,618	74,032	234,232	3.57%
Global	921	-378	1,792	7,124	-0.22%
International- Developed	3,088	38,517	10,589	55,680	6.85%
International- Emerging Markets	-1,302	8,242	-1,215	16,814	3.85%
International- Region	-1,186	5,373	-3,673	5,745	9.69%
International-Single Country	-877	6,119	1,526	9,342	6.68%
Currency Hedged	382	2,036	838	1,941	28.19%

Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. Top two/bottom two categories per period are highlighted. **Past performance is not a reliable indicator of future performance.**

Sectors Slammed

Just two sectors had inflows last month: Energy and Consumer Discretionary. The Energy inflows were supported by a surge in oil prices, as brent crude rallied almost 10% on the month. 12 This supported underlying firm price momentum as the Energy sector was up 2.5%, while the rest of the US equity market was down almost 5% in September. 13

Consumer Discretionary inflows continued the strong buying behavior witnessed all year. The sector now leads all others on year-to-date flows with over \$5 billion. Positive allocations to discretionary stocks are likely a result of supportive economic trends. Those trends are due to better-than-expected economic data indicating a more resilient consumer and, as a result, a lower probability of a recession.

All other sectors posted outflows, leading to sectors in the aggregate to post over \$7 billion of outflows. This is the fifth-worst month of sector outflows ever — a stark indicator of investors' lack of conviction in this market.

There was no distinction between defensive or cyclical sector flow patterns either. Defensives posted \$3 billion of outflows in September, led by the outflows from Health Care and Consumer Staples. This was their second-worst month of outflows ever. Cyclicals weren't too far behind, posting \$1.2 billion of outflows.

This is now the second consecutive month where both cyclicals and defensives posted outflows at the same time. A change in sentiment is needed to avoid both sector types posting outflows three months in a row for the first time ever.

With just a hint of irrational exuberance, or even tempered exuberance, sector flows would more than likely turn positive. Sectors, <u>due to their precise exposure and more direct relationship</u> to underlying firm and <u>economic impacts</u> (e.g., see energy flows and spot price of oil), are an efficient way to express relative and absolute risk through specific overweight and underweight positions.

Figure 6
Sector Flows

In Millions (\$)	September	Year to Date	Trailing 3 Mth	Trailing 12 Mth	Year to Date (% of AUM)
Technology	-1,456	4,222	2,400	6,433	2.85%
Financial	-1,884	321	-2,038	9	0.52%
Health Care	-1,555	-7,302	-2,880	-3,776	-7.02%
Consumer Discretionary	944	5,056	2,077	4,414	22.11%
Consumer Staples	-1,494	-1,407	-1,753	585	-4.47%
Energy	942	-8,570	2,628	-7,737	-9.89%
Materials	-920	-2,236	-761	-1,610	-6.10%
Industrials	-321	1,498	753	2,285	4.46%
Real Estate	-91	-2,559	711	-2,288	-3.65%
Utilities	-474	-870	-811	-2,013	-3.33%
Communications	-1,047	2,317	298	2,669	20.09%

Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. Top two/bottom two categories per period are highlighted. **Past performance is not a reliable indicator of future performance.**

No Government Shutdown in Bond Flows

Bonds took in just \$10 billion in September, but 92% of those flows were driven by the \$9 billion government bond exposures (with \$5 billion going to ultra-short bonds). That percentage is noteworthy as the broader government bond category makes up only 25% of total bond ETF assets.

Ultra-short and short-term government bonds have been the main driver of full-year flows as well; their more than \$40 billion equates to almost half of all government bond flows this year. This reflects investors' tactical allocation decision to: 1) de-risk and 2) seek improving income as the Fed pushes forward with its higher-for-longer narrative.

De-risking meant credit sensitive exposures were shunned. Investment-grade bond exposures saw \$3.7 billion of outflows, a stark reversal of the year-to-date trend. High yield lost \$1.5 billion and now has over \$5 billion of outflows in 2023. But interestingly enough, that has been a bad trade this year. High yield is one of the few bond markets to witness positive returns (up 5.8%), mainly due to carry effects from the higher coupon.¹⁴

Loans are the other asset class within fixed income to post positive returns, and investors have begun to notice. Loan ETFs have had inflows for two consecutive months, with almost \$1 billion of inflows over the past three months.

Figure 7

Fixed Income Flows

In Millions (\$)	September	Year to Date	Trailing 3 Mth	Trailing 12 Mth	Year to Date (% of AUM)
Aggregate	4,304	48,418	10,555	65,359	11.75%
Government	9,076	85,368	25,775	109,432	30.49%
Short Term	4,755	41,438	11,025	53,262	25.42%
Intermediate	2,271	17,583	7,064	22,706	20.51%
Long Term (>10 yr)	2,050	26,346	7,685	33,464	58.02%
Inflation Protected	-461	-11,480	-2,477	-17,970	-14.73%
Mortgage Backed	458	7,712	1,886	11,433	15.43%
IG Corporate	-3,753	5,948	-2,180	15,393	2.62%
High Yield Corp.	-1,468	-5,460	-786	5,824	-8.28%
Bank Loans	535	-1,378	815	-1,629	-10.35%
EM Bond	-267	489	-351	1,475	1.83%
Preferred	-168	61	92	-917	0.19%
Convertible	-169	-526	359	-407	-8.49%
Municipal	1,413	6,327	4,455	22,136	5.96%

Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. Top two/bottom two categories per period are highlighted. **Past performance is not a reliable indicator of future performance.**

Big Flows in Big Markets

Large-cap market exposures were allocated to the most out of any market cap. They took in over \$31 billion when combined with broad market funds. But there was noticeable interest in midcaps and small caps, as both took in about \$1 billion in September. This was likely driven by better valuations in those cap ranges compared to large caps, and as a way to tamp down the concentration in market returns this year.¹⁵

Growth and value were also evenly split, a trend that has been on display over the past quarter and year-to-date. Given the distinct interest in the US, consistent allocations across all style and cap spectrums is no surprise.

Figure 8
US Style Flows

In Millions (\$)	September	Year to Date	Trailing 3 Mth	Trailing 12 Mth	Year to Date (% of AUM)
Broad Market	4,360	29,834	11,663	46,612	5.70%
Large-Cap	27,582	96,483	47,904	147,967	7.34%
Mid-Cap	998	8,256	7,294	16,179	3.05%
Small-Cap	1,509	11,171	5,555	20,875	3.70%
Growth	4,236	9,082	7,520	23,546	1.95%
Value	3,340	11,111	7,038	41,851	1.57%

Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. Top two/bottom two categories per period are highlighted. **Past performance is not a reliable indicator of future performance.**

Barbell of Active and Low Cost in 2023

Active ETFs took in \$11 billion in September — and have now taken in more than \$100 billion over the past 12 months.

Active equity drove inflows last month. August's \$8 billion extends their record run of inflows to 46 consecutive months — a streak that has witnessed total assets rise to nearly \$280 billion. And so far this year, active equity has taken in \$66 billion, which represents a 34% increase in start-of-year assets.

The flows also represent 32% of *all equity ETF fund flows* this year, despite active equity funds only controlling 4.5% of *all equity ETF assets*. Given this dynamic, active as an overall category has taken in 26% of *all ETF flows* this year — despite only representing 4% of *all ETF total assets* under management.

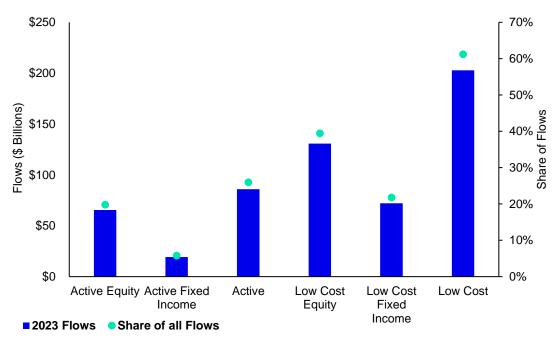
Active fixed income ETFs added \$2.3 billion and now have had five months in a row with more than \$2 billion of inflows. These inflows were concentrated in intermediate core and intermediate core-plus strategies, pushing total year-to-date flows for active bond ETFs to almost \$20 billion. Today's evolving path for monetary policy, where traders and policymakers now agree rates are likely to go higher, alongside mixed fundamentals for credit markets, may keep this trend for active core strategies going.

These flows and low-cost trends are two secular trends driving ETF flows, irrespective of market direction. Low-cost ETFs have taken in \$202 billion this year, bifurcated by \$130 billion in equities and \$72 billion in fixed income. This equates to 61% of *all ETF flows*, despite low-cost ETFs only representing 45% of *all ETF assets*. And the \$130 billion of equity low-cost flows equates to 65% of all equity flows while the \$72 billion for bonds is 52% of all bond flows this year.

As a result, given the lack of market direction this year, two of the more strategic types of allocation exposures (active and low cost) comprise 87% of all flows this year, with strong representation across asset classes (Figure 9).

Figure 9

US Strategy Flows:
Active and Low Cost



Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. **Past performance is not a reliable indicator of future performance.**

Smart Beta funds posted \$3.6 billion of inflows, led by strategies focused on Quality, Value, and Dividends. Quality leads on the year and over the past twelve months, just slightly ahead of dividend funds. And despite the de-risking elsewhere, there was little interest in pure Low Volatility strategies, as they had \$200 million of outflows and now have \$9 billion of outflows in 2023.

Figure 10
US Strategy Flows

In Millions (\$)	September	Year to Date	Trailing 3 Mth	Trailing 12 Mth	Year to Date (% of AUM)
Active	11,495	85,996	33,813	115,581	24.49%
Equity	8,471	65,550	23,135	91,021	34.82%
Fixed Income	2,308	19,192	8,910	23,710	13.56%
Other	715	1,254	1,768	850	5.85%
Smart Beta	3,638	30,599	11,970	57,744	4.47%
Dividend	774	2,761	1,255	18,452	0.76%
Growth	204	1,309	396	2,034	15.40%
Low Volatility	-199	-8,923	-1,271	-6,856	-12.90%
Momentum	-158	-2,306	-665	13	-12.12%
Multi-Factor	-59	2,330	510	2,597	4.20%
Quality	968	18,540	2,603	18,866	42.17%
Size	805	10,510	4,579	12,397	28.50%
Value	1,065	6,165	3,686	10,668	8.11%
Fixed Income	238	213	878	-428	2.11%
Sector Smart Beta	-1,088	-2,595	-1,250	-2,781	-13.90%
ESG	32	-5,935	-1,410	-7,456	-5.96%

Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. Top two/bottom two categories per period are highlighted. **Past performance is not a reliable indicator of future performance.**

Thematics Can't Catch a Break

Only two thematic ETF categories had inflows in September — Robotics & Al and Advanced Health Care together had less than \$100 million. With such lackluster interest, thematic ETFs posted \$747 million of outflows for the month to reach nearly \$2 billion of outflows year to date.

These results would be even worse were it not for the \$1.8 billion of inflows into Robotics and AI funds.

Figure 11

Thematic Flows

In Millions (\$)	September	Year to Date	Trailing 3 Mth	Trailing 12 Mth	Year to Date (% of AUM)
NextGen Trends	-747	-1,835	-1,738	-4,239	-2.7%
Advanced Health Care	35	-36	73	-113	-0.9%
Broad Innovation	-362	-634	-406	-838	-5.1%
Enhanced Connectivity & Exponential Processing Power	-14	-261	-112	-383	-19.3%
Enterprise Collaboration & Cloud Computing	-80	-873	-327	-1,255	-21.0%
FinTech	-33	-266	-66	-416	-14.2%
Future Security	-115	-808	-226	-1,193	-11.1%
Future Tech & Communications	-70	-534	-267	-664	-17.1%
New Consumer	0	-73	26	-139	-8.9%
Robotics & AI	64	1,810	371	1,572	43.4%
Smart Cities	-25	-1	153	-118	0.0%
Smart Transportation	-21	-197	-73	-290	-13.7%
Space Exploration	-6	-41	-12	-50	-12.5%
Sustainable Environment	-121	78	-872	-354	0.3%

Source: Bloomberg Finance, L.P., State Street Global Advisors, as of September 29, 2023. Top two/bottom two categories per period are highlighted. **Past performance is not a reliable indicator of future performance.**

Footnotes

- 1 National Weather Service as of September 29, 2023
- 2 Bloomberg Finance L.P. as of September 29, 2023 based on the Bloomberg US Aggregate Bond Index
- 3 Bloomberg Finance L.P. as of September 29, 2023 based on the Bloomberg US Aggregate Bond Index
- 4 Bloomberg Finance L.P. as of September 29, 2023 based on the S&P 500 Index
- 5 Bloomberg Finance L.P. as of September 29, 2023 based on the correlation of daily returns for the S&P 500 Index and the Bloomberg US Aggregate Bond Index from 1989 to 2023
- 6 FactSet as of September 29, 2023
- 7 FactSet as of September 29, 2023
- 8 FactSet as of September 29, 2023
- 9 FactSet as of September 29, 2023
- 10 Bloomberg Finance L.P. as of September 29, 2023 based on the Bloomberg US Aggregate Bond Index
- 11 Bloomberg Finance L.P. as of September 29, 2023 based on the S&P 500 Index and the MSCI EAFE Index
- 12 Bloomberg Finance L.P. as of September 29, 2023 based on the spot price of Brent Crude Oil
- 13 Bloomberg Finance L.P. as of September 29, 2023 based on the S&P 500 Index and the return on the Energy Sector in the S&P 500 Index
- 14 Bloomberg Finance L.P. as of September 29, 2023 based on the ICE BoFA US High Yield Index
- 15 Bloomberg Finance L.P. as of September 29, 2023 based on the S&P 500 Index, S&P MidCap 400 Index, and S&P SmallCap 600 Index

Definitions

S&P 500[®] **Index** is a market-capitalization-weighted stock market index that measures the stock performance of the 500 largest publicly traded companies in the United States.

S&P MidCap 400 Index is a capitalization-weighted index which measures the performance of the mid-range sector in the US equity market

S&P SmallCap 600 Index is a capitalization-weighted index which measures the performance of the small-range sector in the US equity market

MSCI EAFE Index is a market-capitalization-weighted stock market index that measures the stock performance of the companies in Europe, Australasia, Israel, and the Far East

MSCI ACWI Index is a market-capitalization-weighted stock market index that measures the stock performance of the companies in developed and emerging markets.

The Bloomberg US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate pass-throughs), ABS and CMBS (agency and non-agency).

ICE BofA US High Yield Index tracks the performance of US dollar denominated below investment grade corporate debt publicly issued in the US domestic market

Smart Beta is a term for rules-based investment strategies that don't use conventional market-cap weightings.

RSI the relative strength index (RSI) is a momentum indicator used in technical analysis. RSI measures the speed and magnitude of a security's recent price changes to evaluate overvalued or undervalued conditions in the price of that security.

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Unless otherwise noted, all data and statistical information were obtained from Bloomberg LP and SSGA as of September 29, 2023. Data in tables have been rounded to whole numbers, except for percentages, which have been rounded to the nearest tenth of a percent.

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