Why active fixed income consistently outperforms the Agg

The Bloomberg US Aggregate Index (the Agg) has a long history and is solidly entrenched as a benchmark for bond performance. However, since launching in the mid 1980s, its rules-based construction has grown antiquated and no longer delivers the well-diversified portfolio many believe it to be. Instead of accepting passive strategies that follow this index, investors may prefer strategies deliberately designed for their desired outcome — active Core and Core Plus.

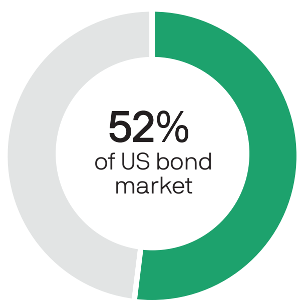
Not all passive indices are created equal

While the Agg is often viewed as representing "the U.S. bond market," it in fact captures just 52% of the U.S. public bond market. Compare that with equity indices like the S&P 500, which covers 81% of the U.S. public equity market — or better yet, the CRSP U.S. Total Market Index, which covers 96%.

$41 Trillion US equity market

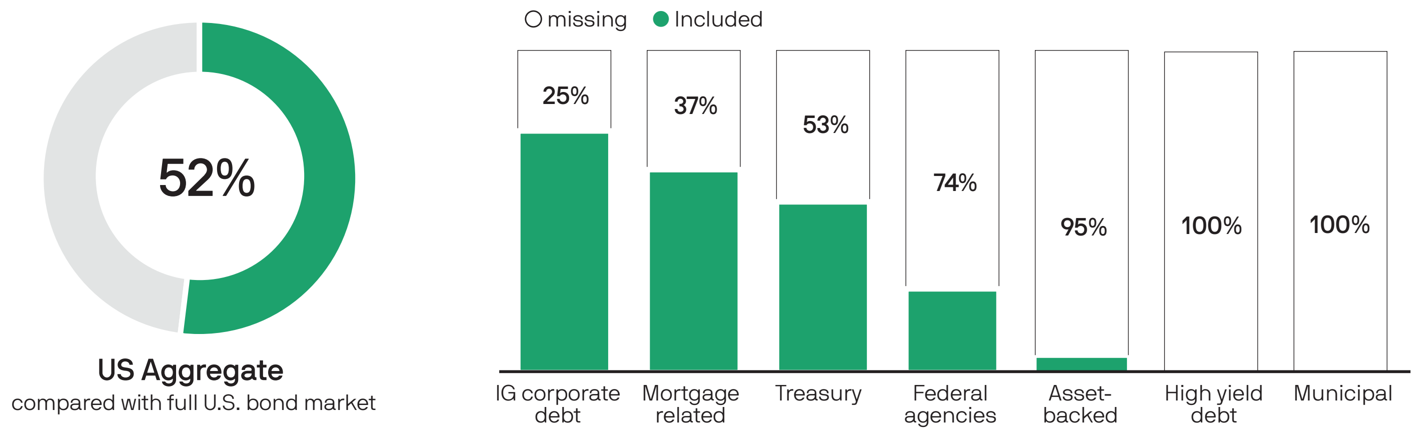
CRSP US Total Market Index
captures 96% of the US stock market

$53 Trillion US bond market



Bloomberg US Aggregate Index
only captures 52% of the US bond market

Source: Bloomberg, SIFMA, J.P. Morgan Asset Management. Figures reflect the most recently available data as of December 31, 2022. Some components may be lagged.



Source: Barclays Live, Bloomberg, SIFMA, J.P. Morgan Asset Management. Figures reflect the most recently available data as of December 31, 2022. Some components may be lagged.

The Agg's construction follows a rules-based process conceived decades ago, at a time when data was most readily available for three primary sectors: U.S. Treasuries, agency mortgage-backed securities (MBS) and investment-grade (IG) corporate bonds. Today's active fixed income managers have considerably more opportunities than the Agg — either by choosing bonds not represented in the index or excluding some that are. Active managers can establish deliberate sector weightings and navigate interest rate changes (duration), rather than just accepting the aggregate result of borrowers' net issuance.

The cost of a low fee

While passive Agg strategies offer optically low fees, investors are repeatedly burned by the cost of lower returns.

In fixed income, active outperforms

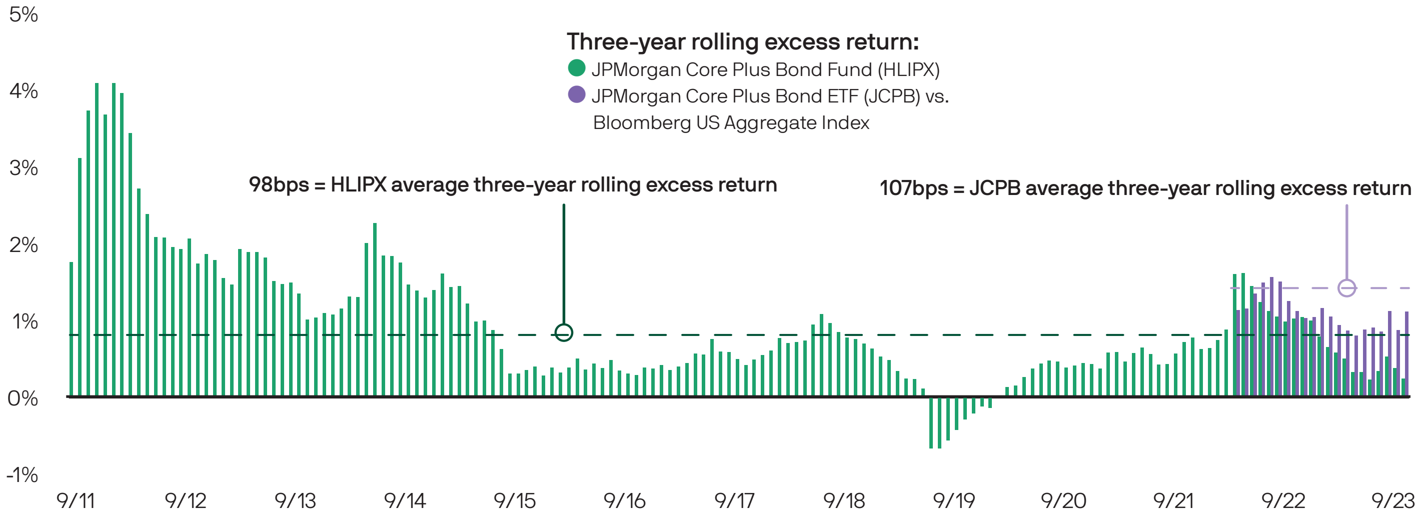
JPMorgan Core Plus Bond Fund (HLIPX) outperforms the index, net of fee:[1]

— **94%** of three-year rolling periods over the last 15 years
— **98bps** average excess return (net of fee, I share class)

JPMorgan Core Plus Bond ETF (JCPB) outperforms the index, net of fee:[1]

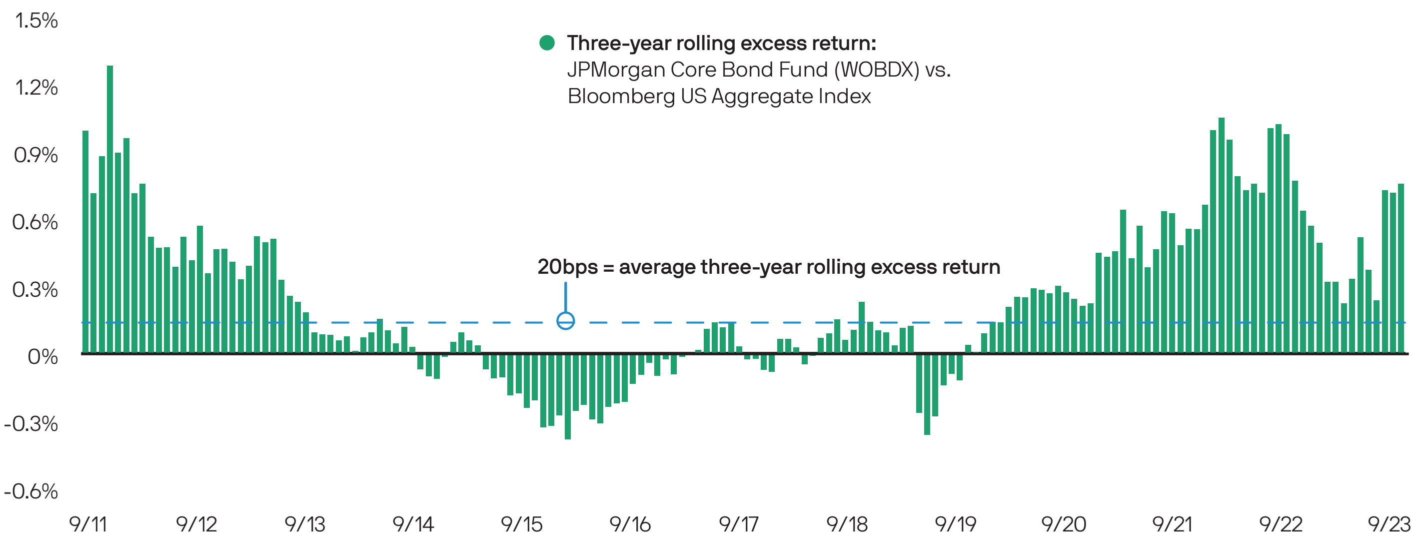
— **100%** of three-year rolling periods since inception in January 2019[2]
— **107bps** average excess return (net of fee)

[1] Rolling three-year periods over a 15-year time span beginning September 30, 2008 and ending September 30, 2023 (first full three-year period starting September 30, 2008 and ending September 30, 2011; bar chart corresponds with the end of each three-year period). Performance reflects I share class. ***Past Performance is no guarantee of future results.***
[2] All rolling three-year periods since inception month beginning January 31, 2019 and ending September 30, 2023 (first full three-year period starting January 31, 2019 and ending January 31, 2022; bar chart corresponds with the end of each three-year period). ***Past performance is no guarantee of future results.***



JPMorgan Core Bond Fund outperforms the index, net of fee:[3]

— **71%** of three-year rolling periods over the last 15 years
— **20bps** average excess return (net of fee, I share class)



[3] Rolling three-year periods over a 15-year time span beginning September 30, 2008 and ending September 30, 2023 (first full three-year period starting September 30, 2008 and ending September 30, 2011; bar chart corresponds with the end of each three-year period). Performance reflects I share class. ***Past performance is no guarantee of future results.***

The Agg is not a well-diversified bond portfolio

In addition to missing large swaths of the market, the Agg rewards the most indebted borrowers by weighting the index based on how much debt an issuer has outstanding. Perversely, this mean that passive Agg strategies end up with concentrated allocations to the largest borrowers — which isn't necessarily the camp investors should want to overweight.

Consider the shift in the Agg's composition since 2000 — not because it better aligns the index to a stated investment goal — but simply because certain borrower types issued more debt. Sector concentrations have increased, both in percentage weighting and weighted duration:

Agg sector weightings (Market Value %)

	2000	2023	▲ | ▼ Change
U.S. Treasuries & Agencies	38%	43%	▲ 5%
Agency MBS	35%	27%	▼ 8%
Investment-Grade Corporates	21%	25%	▲ 4%

Source: Barclays Live. As of December 31, 2000 and September 30, 2023.

Why does it matter?

Today's altered allocations mean the Agg can't perform as in decades past. Look at how prior versions of the Agg would have performed in 2022's market. Compare that to what really happened to investors holding the 2022 version of the Agg last year:

How past iterations of the Agg would have performed in 2022[4]
A year when: 10Y Treasury Yield +236bps | IG spreads +37bps | MBS OAS +20bps

	The 1990 Agg	The 2000 Agg	The 2010 Agg	The 2022 Agg
One-year implied performance, assuming 2022's market changes	-8.4%	-10.1%	-9.7%	-13.0%

Source: Barclays Live. As of December 30, 2022.

Investors wanting a well-rounded portfolio that aligns with expectations should consider active strategies that can pursue deliberate outcomes and capitalize on long-standing fixed income return streams missed by the Agg's antiquated construction process.

[4] Calculated as (2022 sector total return/2022 sector duration) * historic sector duration * historic sector MV%, summed across all major Agg sectors. To better isolate the impact of altered sector MV% and sector duration, coupon return from historical periods vs 2022 is not included. If coupon returns were included, historical Agg returns would be higher given those periods benefited from higher coupon returns than 2022's Agg.

Active in action

It's always a good idea to assess your core bond position on a regular basis. We offer a few suggestions as to how investors can improve upon the Agg.

1. Replace the Agg's short-maturity U.S. Treasuries with short-maturity, high-quality asset-backed securities (ABS)

   - 14% of the Agg is allocated to short-maturity U.S. Treasuries (1-3 years) and just 0.5% in ABS
   - ABS outperformed duration-neutral Treasuries 12 of the past 13 years (since 2010)[3]
   - Average annual outperformance = 0.74% per annum, cumulative advantage = 10% from 2010 to 2022[5]

	Bloomberg Agg	JPM Core Bond Fund	JPM Core Plus Bond Fund	JPM Core Plus Bond ETF
U.S. Treasuries (1-3 year)	14%	4%	<1%	<1%
ABS	<1%	6%	7%	10%

Source: J.P. Morgan Asset Management PRISM.

2. At times, avoid securities the Agg is forced to own by rule, such as low-coupon mortgages during the rapid rate increases of 2022.

   - 70% of the Agg's MBS allocation (20% of the Agg overall) is in some of the lowest coupon mortgage securities ever originated, despite their undesirable characteristics at time of issuance.
   - These 2.0% and 2.5% coupons were issued as homeowners refinanced during COVID-era lows and the Agg was forced to include them by rule.
   - During 2022, these low-coupon mortgages lost between -12% and -14%, far worse than high-coupon mortgage alternatives, which were down -6% to -10%.

In 2022, J.P. Morgan's active strategies were underweight low-coupon MBS and the sector as a whole.

MBS exposure by coupon	Bloomberg Agg	JPM Core Bond Fund	JPM Core Plus Bond Fund	JPM Core Plus Bond ETF
2.0% and 2.5% coupons	20%	9%	8%	8%
3.0% thru 5.0% coupons	8%	18%	13%	16%
Total (all coupons)	29%	27%	21%	24%

Source: Barclays Live, J.P. Morgan Asset Management PRISM. As of December 31, 2022.

[5] Bloomberg Asset-Backed Securities (ABS) Index vs. duration-neutral U.S. Treasuries.

3. Design a more holistic approach to corporate credit

- BBB corporate credit is the last stop on the yield train for IG-only mandates like the Agg and, therefore, tends to be overvalued through time.
  - — 42% of the Agg's corporate credit allocation is in BBB bonds, due to lower-quality borrowing trends.
- JPMorgan Core Plus Bond Fund benefits from designing its credit allocation with both IG and high yield, replacing a portion of BBB index bonds with a blend of A/BB (which averages to BBB).
  - — A 50/50 blend of A/BB creates a BBB average has consistently beat standalone BBB: Average outperformance = 1.06% per calendar year, cumulative advantage = 15%, from 2010 through YTD 2023

Source: Barclays Live, J.P. Morgan Asset Management PRISM. As of September 30, 2023.

When analyzing foundational fixed income in this environment, it pays to consider the advantages that active strategies are designed to deliver.

Performance

Core Bond Fund (I shares)

As of 9/30/23	1 year	3 years	5 years	10 years	Since inception*
At NAV	0.65%	-4.48%	0.53%	1.30%	6.12%
Bloomberg U.S. Aggregate Index	0.64%	-5.21%	0.10%	1.13%	—

Performance quoted is past performance and is no guarantee of future results. investment returns and principal value will fluctuate, so shares, when sold, may be worth more or less than original cost. Current performance may be higher or lower than returns shown. Call 1-800-480-4111 for most recent month-end performance.

* Fund performance inception: 12/31/1983.

The quoted performance of the Fund includes performance of a predecessor fund/share class prior to the Fund's commencement of operations. Please refer to the current prospectus for further information.

Mutual funds have fees that reduce their performance: indexes do not. You cannot invest directly in an index.

Core Plus Bond Fund (I shares)

As of 9/30/23	1 year	3 years	5 years	10 years	Since inception*
At NAV	0.79%	-4.23%	0.56%	1.66%	4.49%
Bloomberg U.S. Aggregate Index	0.64%	-5.21%	0.10%	1.13%	—

Performance quoted is past performance and is no guarantee of future results. investment returns and principal value will fluctuate, so shares, when sold, may be worth more or less than original cost. Current performance may be higher or lower than returns shown. Call 1-800-480-4111 for most recent month-end performance.

* Fund performance inception: 3/5/1993.

The quoted performance of the Fund includes performance of a predecessor fund/share class prior to the Fund's commencement of operations. Please refer to the current prospectus for further information.

Mutual funds have fees that reduce their performance: indexes do not. You cannot invest directly in an index.

Core Plus Bond ETF

As of 9/30/23	1 year	3 years	5 years	10 years	Since inception*
At NAV	1.70%	-4.10%	—	—	0.59%
Market price returns	1.38%	-4.09%	—	—	0.61%

The performance quoted is past performance and is not a guarantee of future results. investment returns and principal value of an investment will fluctuate so that an investor's shares, when sold or redeemed, may be worth more or less than original cost. Current performance may be higher or lower than the performance data shown. For performance current to the most recent month-end please call 1-844-4JPM-ETF.

Performance may reflect the waiver of a portion of the Fund's advisory or administrative fees for certain periods since the inception date. If fees had not been waived, performance would have been less favorable.

* Fund performance inception: 1/28/2019.

YTD returns are as of the last business day of the month.

A fund's NAV is the sum of all it's assets less any liabilities, divided by the number of shares outstanding.

Prior to the implementation of a new management agreement on 11/1/19, performance for some periods may have reflected the waiver of all or a portion of the Funds' advisory or administrative fees and/or reimbursement of other expenses by the adviser. Without these waivers or reimbursements, performance would have been lower.

Effective 12/19/19 the market price returns are calculated using the official closing price. Prior to 12/9/19 the market price returns were calculated using the midpoint between the highest bid and the lowest offering on the listing exchange as of the time that the Fund's NAV is calculated.

ETFs have fees that reduce their performance, indexes do not. You cannot invest directly in an index.

Performance quoted is past performance and is no guarantee of future results. Investment returns and principal value will fluctuate, so shares, when sold, may be worth more or less than original cost. Current performance may be higher or lower than returns shown. Call 1-800-480-4111 for most recent month-end performance.

Investors should carefully consider the investment objectives and risks as well as charges and expenses of the JPMorgan ETF before investing. The summary and full prospectuses contain this and other information about the ETF. Read the prospectus carefully before investing. Call 1-844-4JPM-ETF or visit www.jpmorganETFs.com to obtain a prospectus.

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Mutual funds have fees that reduce their performance; indexes do not. You cannot invest directly in an index. The Bloomberg U.S. Aggregate Index is an unmanaged index representing SEC-registered taxable and dollar denominated securities. It covers the U.S. investment-grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through and asset-backed securities.

Investing involves risk, including possible loss of principal. Investment returns and principal value of an investment will fluctuate so that an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Brokerage commissions will reduce returns.

Actively managed funds typically charge more than index-linked products. Asset allocation/diversification does not guarantee investment returns and does not eliminate the risk of loss.

Investments in bonds and other debt securities will change in value based on changes in interest rates. If rates rise, the value of these investments generally drops.

Core Bond Fund & Core Plus Bond Fund Risk Summary: Risk Summary Investments in bonds and other debt securities will change in value based on changes in interest rates. If rates rise, the value of these investments generally drops.

The value of investments in mortgage-related and asset-backed securities will be influenced by the factors affecting the housing market and the assets underlying such securities. The securities may decline in value, face valuation difficulties, become more volatile and/or become illiquid. They are also subject to prepayment risk, which occurs when mortgage holders refinance or otherwise repay their loans sooner than expected, creating an

The Fund could experience a loss and its liquidity may be negatively impacted when selling securities to meet redemption requests by shareholders. The risk of loss increases if the redemption requests are unusually large or frequent or occur in times of overall market turmoil or declining prices. Similarly, large purchases of Fund shares may adversely affect the Fund's performance to the extent that the Fund is delayed in investing new cash and is required to maintain a larger cash position than it ordinarily would.

Additional Risk Disclosures for Core Plus Bond Fund and JCPB: CMOs are collateralized mortgage obligations, which are issued in multiple classes, and each class may have its own interest rate and/or final payment date. A class with an earlier final payment date may have certain preferences in receiving principal payments or earning interest. As a result, the value of some classes may be more volatile and may be subject to higher risk of nonpayment.

Securities rated below investment grade are considered "high-yield," "non-investment grade," "below investment-grade," or "junk bonds." They generally are rated in the fifth or lower rating categories of Standard & Poor's and Moody's Investors Service. Although they can provide higher yields than higher rated securities, they can carry greater risk.

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