Insights

Five Ways to Customize Your Fixed Income Core

With yield of the standard 60/40 stock/bond portfolio well below historical averages, fixed income investing has never been more important than it is today.

January 11, 2022

Matthew J Bartolini, CFA
Head of SPDR Americas Research

Share

Following extraordinary monetary policies that sent rates tumbling and stock prices higher, the yield of the standard 60/40 stock/bond portfolio is now 41% below its long-term average.[1]

With stocks yielding near their record low, bonds are needed more than ever to carry the coupon load for a portfolio. However, basic bonds yield only 1.27%.[2] Therefore, generating more income requires you to take on more risk — either duration, credit or currency.

Unfortunately, the composition of the Bloomberg US Aggregate Index (Agg), a common core exposure, leaves it vulnerable to duration risks. Also, the Agg does not produce

sufficient income – nor does it act as an “aggregate” of all fixed income sectors. Expanding beyond the Agg and/or dissecting the Agg's sectors to target specific risk and return characteristics can better position today’s portfolios.

Given the nearly 500 strategies currently in market, exchange traded funds (ETFs) can be useful tools to gain different exposures — both within and beyond the Agg as well as with active and passive mandates. To tailor your fixed income allocation to meet your risk tolerance and income objectives, you can:

1. Seek to Optimize the Agg’s Yield per Unit of Duration

The Agg's market-cap weighting scheme results in a heavy bias toward Treasuries (~40%), which tends to reduce the index's yield while extending its duration. A basic solution to this would be to construct an equal weighted portfolio of the Agg’s subcomponent sectors (investment-grade corporates/credit, mortgage-backed securities and Treasuries). This results in a more balanced sector exposure with a similar risk/return (duration/yield) profile, along with an ever-so-slight improvement to the yield-per-unit of duration metric (0.27 versus 0.26 for the Agg).

Yet, this slight improvement doesn’t really solve the current conundrum in fixed income portfolio construction.

Optimizing the weighting of the subcomponents (maturity bands) of the core Agg sectors to maximize the yield per unit of duration can take an alternative weighted core Agg a step further — allowing you to meet your objectives with more precision while staying within the traditional exposures of the Agg.

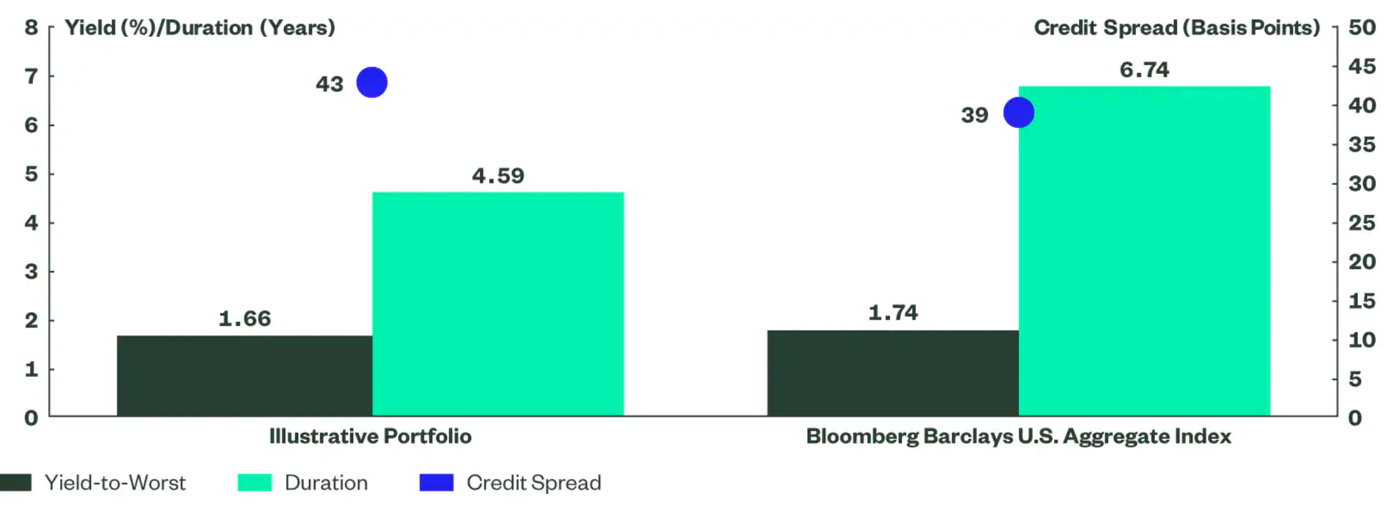
By using targeted exposures to delineate between short-, intermediate- and long-duration exposures within the corporate and Treasury sleeves (a tactic that can be efficiently implemented with the range of transparent fixed income ETFs), you can adjust the balance between all segments to target the best possible exposure given portfolio constraints – such as the yield and duration tradeoff.

The figures below illustrate how the Agg sector weights are adjusted to optimize yield per unit of duration while still complying with risk constraints. With 32% less duration but no sizeable reduction in yield, this allocation improves the risk/return tradeoff afforded by the Agg by 40% (0.36 versus 0.26 yield per unit of duration), while staying aligned to the heritage sector exposure and not noticeably increasing spread risk.

Optimized Core Agg Sector Weights and Constraints

Portfolio Weights		
Treasuries	Short Term	14.0%
	Intermediate	3.0%
	Long Term	3.0%
Corporates	Short Term	13.4%
	Intermediate	23.6%
	Long Term	3.0%
Mortgages		40.0%
Constraints	Agg Sector Weight Cannot Exceed 40% or be less than 20%	
	Each Duration Bucket Weight must be between 3% and 30%	
	Portfolio Option Adjusted Spread Cannot Exceed the Agg by 20%	

Optimized Portfolio Versus the Agg



Source: Bloomberg Finance L.P., as of 12/15/2021. Characteristics are as of the date indicated and may be subject to change.

2. Add Nontraditional Bond Sectors

If you find that the confines of mortgages, Treasuries and corporates are too narrow to meet your objectives without overconcentrating the portfolio in any one sector, ancillary bond segments can offer potential diversification and income benefits.

Bond segments like senior loans, high yield and emerging market debt are historically less correlated with the Agg.[3] When assets are less correlated with one another, their prices tend to diverge, and this greater diversification potentially reduces risk. Incorporating these bond segments could help boost a portfolio's risk/return profile.

The hypothetical example below allocates 30% of the core fixed income portfolio to nontraditional bond sectors while maintaining the 70% weighting to the optimized Agg exposure shown in the previous example. As illustrated, this would result in an improved yield/duration profile, one without overconcentration in any one complement exposure.

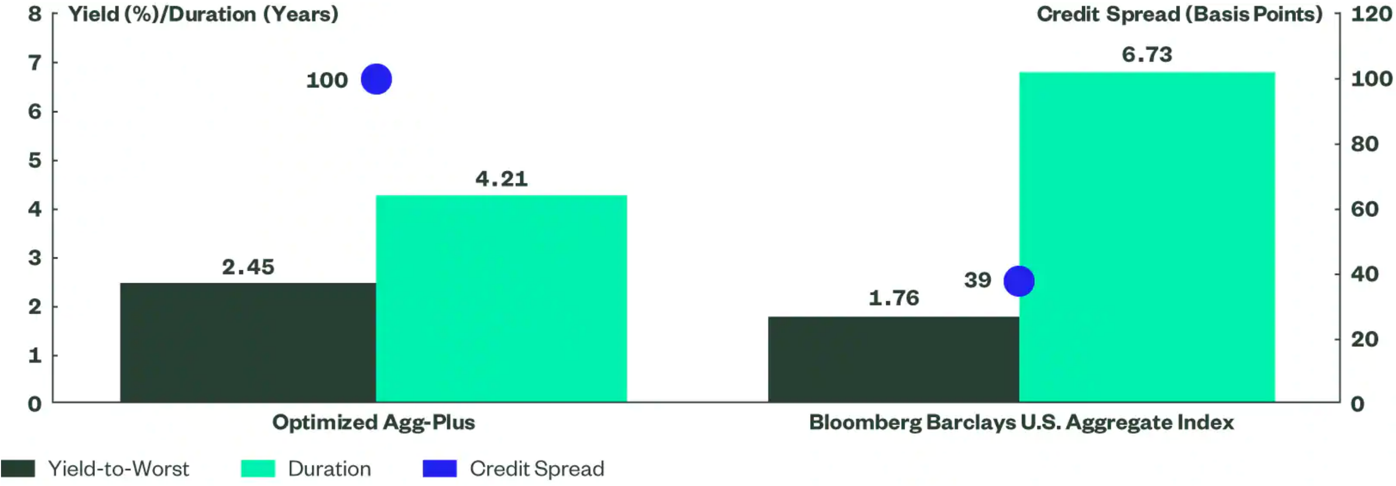
Following this rules-based approach leads to a portfolio with 124% higher yield per unit of duration than that of the Agg (0.58 versus 0.26) and increased diversification across geographies and sectors. It also avoids taking on significant spread risk, as the overall credit spread level is commensurate with investment-grade corporate bonds (100 versus 80 basis points).[4] As for diversification, the Bloomberg Fixed Income Risk Model shows that this portfolio has a lower expected standard deviation than the broader Agg, 2.91% versus 3.86%, due to the more expansive portfolio containing less correlated markets that go beyond a simple mix of high-grade corporates and Treasuries.

Optimized Core-Plus Agg Sector Weights and Constraints

Portfolio Weights		
Treasuries	Short Term	10.0%
	Intermediate	2.0%
	Long Term	2.0%
Corporates	Short Term	9.0%

	Intermediate	17.0%
	Long Term	2.0%
Mortgages		28.0%
Nontraditional	EM Local Debt	2.0%
	US High Yield	6.0%
	Preferreds	10.0%
	Senior Loans	10.0%
	Pan-European High Yield	2.0%
Portfolio Constraints		
	70% in Optimized Agg	
	No more than 10% in one of the non-Agg sectors	
	No less than 2% in one of the non-Agg sectors	
	Credit Spread less than 100 basis points	
	Yield more than the Agg	

Optimized Agg-Plus Versus the Agg



Source: Bloomberg Finance L.P., as of 12/15/2021. Characteristics are as of the date indicated and may be subject to change.

3. Structure Allocations Based on Outcomes

Bonds' role in a portfolio generally falls across three dimensions: Income, Diversification, and Stability. And, as mentioned, core bonds have an unattractive yield and duration profile, constraining returns and income. Therefore, the portfolios mentioned so far seek to maximize yield per unit of duration while keeping spread risk (credit risk and implicit equity biases) in control. However, rather than use this optimized approach, you could structure a portfolio to target the three goals of a bond portfolio in an equal manner.

To do this, assets must be selected for their properties related to those three attributes and placed into three individual buckets. Within each bucket, the strategies are then equal weighted to provide overall diversification where no one area dominates the portfolio – neither the buckets nor the underlying strategies.

The three buckets are defined as:

- Diversification: Strategies with a negative correlation to stocks
- Income: Markets with a high income potential
- Stability: Exposures with low standard deviation of returns, likely short-term funds

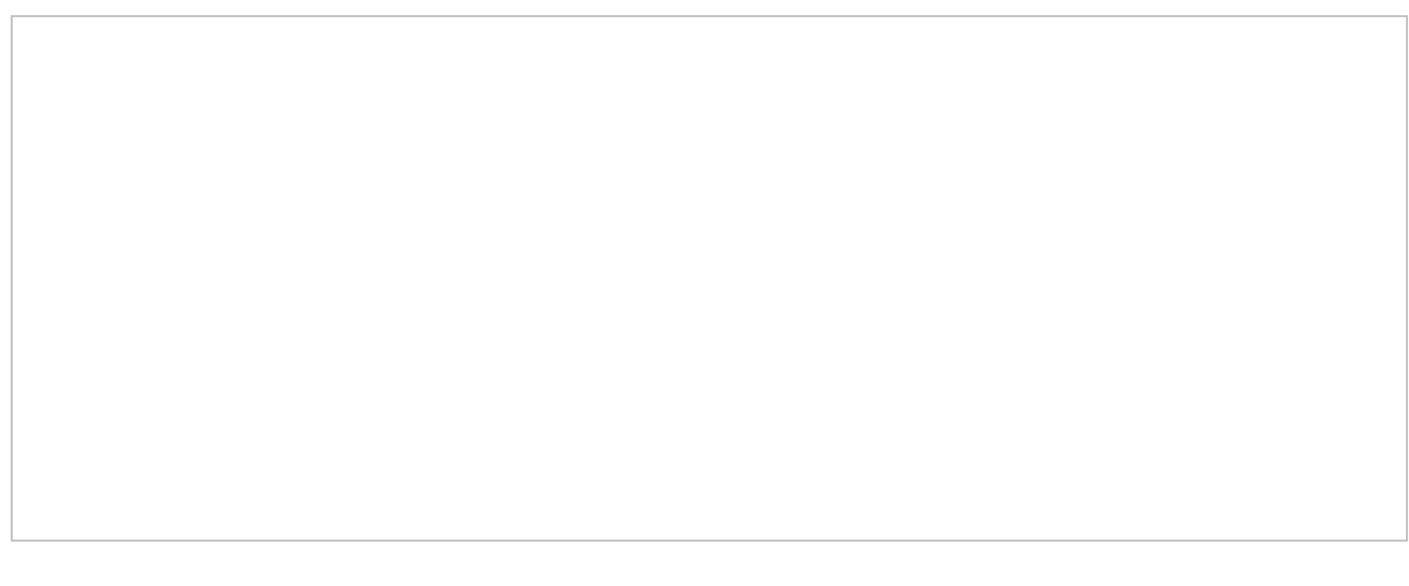
The chart below shows the allocations to these three buckets and the ensuing results relative to the Agg. As shown, the three bucket portfolio has a yield above that of the Agg and a lower duration along with an option adjusted spread just slightly over 100 basis points. Additionally, the Bloomberg Fixed Income Risk Model shows that this portfolio

has a lower expected standard deviation than the broader Agg, 3.72% versus 3.86%, due to its focus on diversity and stability in addition to income.

Three Bucket Portfolio Weights

Portfolio Weights		
Diversification	Long-term Treasuries	11.1%
	Long-Term Corporates	11.1%
	Mortgages	11.1%
Income	High Yield	8.33%
	Senior Loans	8.33%
	EM Local Debt	8.33%
	Preferreds	8.33%
Stability	Investment-Grade Floating Rate Notes	11.10%
	Short-term Treasuries	11.10%
	Ultra-Short bonds	11.10%

Three Bucket Portfolio Versus the Agg



4. Focus on Risk Parity High Income

The portfolios above seek income for a given level of risk, but in all cases the yield obtained is below inflationary expectations of 2.7% over the next five years.[5]

Generating a higher yield requires taking on more credit risk, potentially increasing the overall volatility of a portfolio as some high income segments have higher levels of risk. To navigate this challenge, you could focus solely on high income sectors but in a risk aware manner through an equal risk weighted approach (i.e., risk parity).

Risk parity focuses on balancing the risk contributions of assets in a portfolio, and when determining portfolio weights, it focuses both on an asset's volatility and correlations. While you can construct this portfolio using a model that focuses on expected risk, I chose here to focus on historical volatility and correlations (with a 12-month lookback) for simplicity and transparency. And it's worth noting that the marginal contribution of risk from an asset will change as the volatility profile of assets change. As a result, the weights below could change depending on the market environment.

For today's market, applying a risk parity approach to high income sectors such as EM local debt, global short-term high yield, US short-term high yield and senior loans results in a portfolio with a yield of 4.4%, a duration of 2.11 years and a credit spread on par with a single fixed rate high yield exposure (308 versus 318), as shown below. The portfolio also features more sector diversity (and yield) than owning only high yield as an income producing sleeve. From a risk model perspective, standard deviation is actually below that of the Agg and a standalone high yield exposure (3.74% versus 3.86% and 4.16%), as

some of these high income sectors are not that closely correlated, and less volatile segments do receive a higher weight.

Risk Parity High Income Weights

Portfolio Weights	
Bank Loans	30.0%
Preferreds	8.8%
Short-term US High Yield	24.1%
Short-term Global High Yield	30.0%
EM Local Debt	7.1%

Capital Efficent Risk Parity High Income Versus the Agg

5. Create a Capital Efficient Risk Parity High Income Core

This fifth portfolio expands on the risk parity high income idea, acknowledging that a pure high income portfolio would have a high level of implicit equity risk and therefore, not really offer total portfolio diversification to the equity side of an allocation. To try and

maintain the intent of a high income portfolio but efficiently balance equity diversification, add long-term Treasuries.

Long-term Treasuries (20+ maturity) have a duration of 19.85 years.[6] Given that the Agg has a duration of 6.8, a 34% allocation to long-term Treasuries would provide a broader portfolio with the same dollar duration as a 100% allocation to the Agg. Therefore, long-term Treasuries are a more *capital efficient* tool (i.e., you only need one-third of the portfolio to obtain the same duration profile as broad core bonds) for basic bond diversification.

Given that the high income risk parity portfolio has only two years of duration, a 30% and 70% split between long-term Treasuries and the risk parity high income sleeve provides a similar level of duration (7.3 versus 6.74) as a 100% Agg exposure, but with a strong yield improvement, as shown below. And as far as implicit equity risk, the historical three-year beta to the S&P 500 Index of a capital efficient risk parity high income portfolio drops to 0.21 from 0.38 for the sole risk parity allocation.[7]

Capital Efficient Risk Parity High Income Versus the Agg

Building Better Bond Portfolios with ETFs

While indexing to the Agg can provide an off-the-shelf solution for broad fixed income exposure, investor risk constraints, return objectives and tax considerations can vary significantly. When looking to customize beyond what the Agg offers, fixed income ETFs, including actively managed solutions, can be effective building blocks for a tailored portfolio.

Check out our ETF product list to view all our fixed income ETFs. And our quarterly SPDR Fixed Income Dashboard can help you analyze the current fixed income marketplace.

Footnotes +

Glossary +

Disclosures +

Contact Us

Twitter LinkedIn YouTube

Content on this site is approved for Investment Professional use only.

View More Information About Our Firm: FINRA's BrokerCheck

ETFs trade like stocks, are subject to investment risk, fluctuate in market value and may trade at prices above or below the ETFs net asset value. Brokerage commissions and ETF expenses will reduce returns.

Standard & Poor's®, S&P® and SPDR® are registered trademarks of Standard & Poor's Financial Services LLC (S&P); Dow Jones is a registered trademark of Dow Jones Trademark Holdings LLC (Dow Jones); and these trademarks have been licensed for use by S&P Dow Jones Indices LLC (SPDJI) and sublicensed for certain purposes by State Street Corporation. State Street Corporation's financial products are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates and third party licensors and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability in relation thereto, including for any errors, omissions, or interruptions of any index.

Distributor: State Street Global Advisors Funds Distributors, LLC, member FINRA, SIPC, an indirect wholly owned subsidiary of State Street Corporation. References to State Street may include State Street Corporation and its affiliates. Certain State Street affiliates provide services and receive fees from the SPDR ETFs. ALPS Distributors, Inc., member FINRA, is the distributor for DIA, MDY and SPY, all unit investment trusts.

ALPS Portfolio Solutions Distributor, Inc., member FINRA, is the distributor for Select Sector SPDRs. ALPS Distributors, Inc. and ALPS Portfolio Solutions Distributor, Inc. are not affiliated with State Street Global Advisors Funds Distributors, LLC.

THIS SITE IS INTENDED FOR QUALIFIED INVESTORS ONLY.

No Offer/Local Restrictions

Nothing contained in or on the Site should be construed as a solicitation of an offer to buy or offer, or recommendation, to acquire or dispose of any security, commodity, investment or to engage in any other transaction. SSGA Intermediary Business offers a number of products and services designed specifically for various categories of investors. Not all products will be available to all investors. The information provided on the Site is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to law or regulation.

All persons and entities accessing the Site do so on their own initiative and are responsible for compliance with applicable local laws and regulations. The Site is not directed to any person in any jurisdiction where the publication or availability of the Site is prohibited, by reason of that person's nationality, residence or otherwise. Persons under these restrictions must not access the Site.

Information for Non-U.S. Investors:

The products and services described on this web site are intended to be made available only to persons in the United States or as otherwise qualified and permissible under local law. The information on this web site is only for such persons. Nothing on this web site shall be considered a solicitation to buy or an offer to sell a security to any person in any jurisdiction where such offer, solicitation, purchase or sale would be unlawful under the securities laws of such jurisdiction.

Before investing, consider the funds' investment objectives, risks, charges and expenses. To obtain a prospectus or summary prospectus which contains this and other information, call 1-866-787-2257, download a prospectus or summary prospectus now, or talk to your financial advisor. Read it carefully before investing.

Not FDIC Insured * No Bank Guarantee * May Lose Value

2732006.7.1.AM.INST
Exp. 01.31.2023

© 2022 State Street Corporation. All rights reserved.

Global Privacy Notice

Cookie Settings

Cookie & Online Tracking Disclosure

Copyright

Bcp