

FIXED INCOME PORTFOLIO REPORT

Duke Tran

DRIFTWOOD INVESTMENT GROUP

December 20, 2021

EXECUTIVE SUMMARY

The Driftwood Investment Group (**DIG**) set out to replicate the Bloomberg US Aggregate Bond Index (ticker: LBUSTRUU). This index tracks sub-classes of fixed income assets. We started with \$90,000,000 in initial capital to passively invest in this portfolio. Over a holding period of 22 days (11/15/21 - 12/7/21), the portfolio generated a return of **3.32%**, greatly outperforming the LBUSTRUU index, which yielded 0.41%. The strongest performing sub-classes were treasuries (**+1.10%**) and corporate bonds issued by industrial corporations (**+0.71%**). Of the several performance metrics that we calculated, the most notable was the Sharpe ratio (**9.68**), which indicated that the portfolio yielded a greater return given its level of risk in volatility. Hence, we would recommend this portfolio to investors who are looking for steady returns with relatively low risk and slightly higher volatility than the LBUSTRUU index.

INTRODUCTION

This portfolio was designed and implemented to replicate the Bloomberg US Aggregate Bond Index (ticker: LBUSTRUU). The index tracks various sub-classes of fixed income assets:

- Asset-backed securities (ABS)
- Agency debentures
- Commercial mortgage-backed securities (CMBS)
- Corporate bonds issued by financial institutions
- Corporate bonds issued by industrial corporations
- Local authority (municipal) bonds
- MBS pass-throughs
- Sovereign bonds
- Supranational bonds
- Treasuries
- Corporate bonds issued by utility corporations

The weightings of the index are outlined in the table below, recorded as of November 15, 2021.

Detail		
	Weighting	Market Value
(LBUSTRUU) Bloomberg US Agg Total Return Value Unhedged USD	100.00	26,324,475,896
ABS	0.29	75,614,517
Agency	2.18	572,945,716
CMBS	2.04	536,821,299
Financial Institutions	8.13	2,139,909,618
Industrial	15.78	4,154,504,293
Local Authority	0.98	258,096,970
MBS Passthrough	27.45	7,225,222,728
Sovereign	1.05	275,666,194

Supranational	1.41	371,987,749
Treasury	38.57	10,154,461,439
Utility	2.12	559,245,374

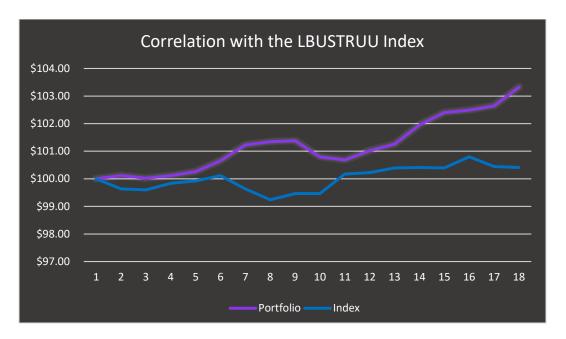
For this portfolio, the index was replicated omitting a few sub-classes. Specifically, we did not include ABSs, municipal bonds, sovereign bonds, and supranational bonds. The portfolio was allotted \$90,000,000 to be allocated to the various asset sub-classes according to their respective weights within the index. Since we excluded some sub-classes, the weights had to be readjusted appropriately to ensure the index could be replicated as accurately as possible. Below is a table outlining the readjusted weights of each sub-class and their dollar allocations given the initial capital of \$90 million.

	Weight	Actual Dollar Allocation	
Agency	2.18	\$	2,037,323.25
CMBS	2.04	\$	1,906,703.67
Corporate Bonds Issued by Financial Institutions	8.13	\$	7,581,580.04
Corporate Bonds Issued by Industrial	15.78	\$	14,742,201.40
MBS Passthrough	27.45	\$	25,659,096.39
Treasury	38.57	\$	36,057,398.38
Corporate Bonds Issued by Utility	2.12	\$	1,980,519.77

The portfolio was to be passively managed; the individual investments would be made at the creation of the portfolio and would remain untouched for the duration of the holding period, which began on November 15, 2021 and ended on December 7, 2021. An additional \$10,000,000 in cash was set aside to be allocated towards an active management strategy, but unfortunately, we did not have enough time to implement this and therefore will only be analyzing the performance of the passive portion of the portfolio.

PERFORMANCE ANALYSIS

In total, the portfolio had a holding period of 22 days (from 11/15/21 - 12/7/21). Over this period, the portfolio generated a cumulative return of **3.32%**, whereas the LBUSTRUU index only generated 0.41% in returns. The portfolio seemed to be much more volatile than the index and did not have a strong correlation with the index (hovering around 58%). This could have been due to several factors, such as excluding asset sub-classes, variations in the price movements of the individual picked assets, or differing aspects (coupon rates, maturities, etc.) of the picked assets compared to those within the index resulting in differing cash flows.



Looking at the asset sub-classes, treasuries (+1.10%) and corporate bonds issued by industrial corporations (+0.71%) performed the best within the replicating portfolio, while MBS pass-throughs (-0.03%) and CMBSs (-0.01%) performed the worst. Outlined below are the cumulative returns of the asset sub-classes.

Table Return Attribution	
Bucket	Cumulative Return
Agency	0.24%
CMBS	-0.01%
Corporates (Financial)	0.12%
Corporates (Industrial)	0.71%
MBS Passthrough	-0.03%
Treasury	1.10%
Corporates (Utility)	0.17%

Several performance metrics were calculated for the portfolio, including the Sharpe ratio, alpha, and information ratio. The results are summarized in the table below.

Performance Measures				
	Sharpe Ratio		Alpha	Information Ratio
Entire Portfolio		9.68	49.97%	5.55

Most notably of the metrics is the Sharpe ratio, which is rather high, indicating a greater return on investment given its level of risk in volatility. The portfolio also generated an alpha of **49.97%**, indicating it greatly outperformed the benchmark we used (iShares Core U.S. Aggregate Bond ETF, ticker: AGG) to gauge the performance of the portfolio. Finally, the

information ratio is also rather high, indicating a greater return on investment compared to the benchmark.

DISCUSSION

Overall, this portfolio yields a higher return with relatively similar risk to the LBUSTRUU index as well as the AGG benchmark. It attempts to replicate the LBUSTRUU index, and although with loose correlative success, it still adheres to the outlined asset sub-classes and similar relative weighs. Moreover, given that it's a passively managed portfolio, its fees would be lower despite its great performance. If you're an investor looking to focus on fixed income investments, or if you're looking for diversification away from equities, this portfolio would be a perfect fit for you. It generates steady returns with relatively low risk and slightly higher volatility than the LBUSTRUU index.