

Project report

FIM 590 - Fixed Income and Analysis

November 01st 2021

Holdings (BOP)

Portfolio					
Sector	Treasuries Markets and Interest Rate Swaps				
Initial Amount September 1, 2021	\$ 10,000,000	Value as of October 1, 2021	\$9,815,768.00	Date	9/31/2021
Initial Fund Allocations					
Fund	Fund Code	Portfolio Weight	Initial Amount invested	Closing price	Units held
iShares 7-10 Year Treasury Bond ETF	IEF	0.3	\$2,909,261	\$115.24	25245
iShares 1-3 Year Treasury Bond ETF	SHY	0.36	\$3,496,812	\$86.14	40595
iShares 20+ Year Treasury Bond ETF	TLT	0.14	\$1,409,695	\$144.36	9765
ProShares UltraShort 20+ Year Treasury (TBT)	TBT	0.2	\$2,000,000	\$18.35	108992
Total		1	\$9,815,768.00		

As of 30th September 2021, the fund consisted of 4 ETFs, up from 3ETFs in the beginning of the portfolio. Weights were assigned keeping in mind the volatility ahead in terms of the special economic measures (for the pandemic) and future inflation expectation.

Below is the composition of the funds

IEF - This is an ETF consisting of around 11 treasury notes and a few cash derivatives. The treasury notes all have 7-10 years left to maturity. 70% of the notes mature between 2029 and 2031. The total fund value is around \$14.28 billion and an estimated duration of 8.05

SHY - This is an ETF consisting of around 75 treasury notes and bonds and a few cash derivatives. The treasury notes all mature before 30th September 2024. The total fund value is around \$20.29 billion and an estimated duration of 1.92

TLT - This is an ETF consisting of around 30 treasury bonds and a few cash derivatives. The treasury bonds all mature between May 2041 and August 2051. The total fund value is around \$15.36 billion and an estimated duration of 19.26

TBT - This ETF offers 2x short leveraged exposure to the broad-based Barclays Capital U.S. 20+ Year Treasury Index, making it a powerful tool for investors with a bearish short-term outlook for U.S. long-term treasuries.

Holding Period Return

Fund value as of 11/1/2021					
Fund	Fund Code	Units held	Closing price	Market Value	HPR October (annualized)
iShares 7-10 Year Treasury Bond ETF	IEF	25245	\$114.54	\$2,891,589.64	-19.73%
iShares 1-3 Year Treasury Bond ETF	SHY	40595	\$85.80	\$3,483,009.46	-1.52%
iShares 20+ Year Treasury Bond ETF	TLT	9765	\$146.52	\$1,430,787.56	-35.69%
ProShares UltraShort 20+ Year Treasury (TBT)	TBT	108992	\$17.15	\$1,869,209.81	-20.00%

The portfolio gave a -15.96% annualized return over the month of October. The asset value of the fund stands at **\$9,674,596** giving the total holding period return over the 2 months as -18%.

Commentary / thoughts on the returns

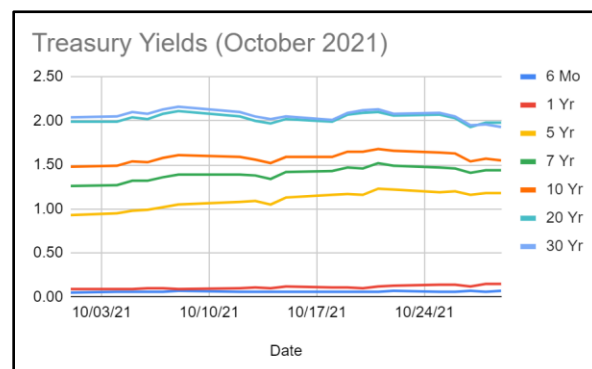
The portfolio performed poorly, similar to the last period. The reasons for this can be broadly attributed to the following market developments:

- Expectation vs Actual

Given the economic conditions in September and the news of the Fed's tapering of economic measures, the expectation was that the long term yields would be most affected and would increase in response to the withdrawal of the 120\$ billion of long positions by the Fed. However, the yields have unexpectedly decreased. This explains losses the portfolio booked.

TBT is a leveraged ETF and is supposed to provide 2x inverse returns compared to the TLT ETF. Factoring in the investment amounts and the units held, the returns of TBT were over twice the inverse returns from TLT.

The expectation of short term yields remaining the same (least affected) was also not met. The short and mid term yields have all increased over the month, some even by a whopping 25bps.



- Reason for long term yields decrease

The exact reason is stated to be the lower than usual demand. The fall in rates could be attributed to the sentiment of 'policy error' on behalf of the Fed. Market watchers believe that the Fed's policy to support the economy could backfire amid the increase in inflation across the country.

- Increases yields due to better economic growth factors

The yield increase can also be attributed to the strong demand in the economy. Increased retail sales were reported in September while the unemployment rate also improved more than expected. These factors coupled with inflation are the main things that the Fed will use to begin tapering pandemic measures.

The position taken by the portfolio on September 30 was based on the fact that the Fed tapering would force the yields of the rates to drive up. Owing to their higher duration, the long term bonds and their ETFs were supposed to be adversely affected. Hence, the highly levered short position was expected to be profitable. However, due to the above factors, the positions did not work. Even the short term to mid term yields were expected to be stable but that did not happen amid increased volatility due to debt-ceiling debates and other factors.

Next Steps and Rebalancing

The expectation now remains similar to the previous month. TLT is expected to decline and the levered position using TBT is expected to be profitable once tapering begins (this month). Keeping this in mind, it makes sense to sell TLT units to book some profits and invest in short funds like TBT. Rest of the allocations are expected to remain the same owing to the fact that they have risen quite a lot this month.

- Selling TLT units to buy more of the TBT units.

New fund Composition as of 31st October 2021

Fund	Fund Code	Portfolio Weight	Current Holding	Closing price	Units held
iShares 7-10 Year Treasury Bond ETF	IEF	29%	\$2,891,590	\$114.54	25245
iShares 1-3 Year Treasury Bond ETF	SHY	35%	\$3,483,009	\$85.80	40595
iShares 20+ Year Treasury Bond ETF	TLT	0%	\$0	\$146.52	0
ProShares UltraShort 20+ Year Treasury (TBT)	TBT	34%	\$3,299,997	\$18.35	192420
Total			\$9,674,596		