

Investment Opportunities in 2023

1. Inflation and the Fed's Rate Hikes.

The economic cycle in the United States can be roughly divided into four stages: prosperity, recession, depression, and recovery, and each cycle lasts for several years. An important measure for the U.S. government to intervene in the economy is that the Federal Reserve Board (equivalent to the central bank) announces the benchmark interest rate in eight public meetings each year, that is, the overnight interest rate of funds between banks and the Federal Reserve and between banks. Except for this ultra-short-term interest rate, other short-term, medium-term, and long-term interest rates (from a few days to several years) are completely determined by supply and demand in the market. Of course, this benchmark interest rate has a direct impact and guidance on other interest rates .

Now, the U.S. economy is in the early stage of a recession. After more than a decade of long-term prosperity, the extremely low loan interest rates have led to economic expansion, falling unemployment, rising wages, and increased purchasing power, which has finally caused the worst inflation in 40 years. . Figure 1 shows the changes in the US inflation index over the past five years.



Figure 1. US inflation index over past 5 years.

In order to curb inflation, the Federal Reserve started a large-scale interest rate hike that is rarely seen in history on March 17, 2022. Among them, the interest rate was raised by 75 points (0.75%) four times from June 16 to November 2, the highest in history. Inflation momentum has eased slightly after these seven rate hikes. The Fed's goal is to reduce inflation to a level of about 2%, for which the benchmark interest rate should be maintained at a high level of about 5%. The current benchmark interest rate is 4.25% to 4.50% (see Table 1), which means that in 2023, the interest rate will be increased by about 0.75%. This will be done in two to three times, depending on the economic situation and inflation. The Fed would face

a dilemma, raising rates too aggressively would lead to a deep recession, while raising rates too little would hardly curb inflation.

Table 1. Details of Fed rate hikes in 2022.

FOMC Meeting Date	Rate Change (bps)	Federal Funds Rate
Dec 14, 2022	+50	4.25% to 4.50%
Nov 2, 2022	+75	3.75% to 4.00%
Sept 21, 2022	+75	3.00% to 3.25%
July 27, 2022	+75	2.25% to 2.5%
June 16, 2022	+75	1.5% to 1.75%
May 5, 2022	+50	0.75% to 1.00%
March 17, 2022	+25	0.25% to 0.50%

2. Stock Market Analysis

Changes in the U.S. securities market are closely related to the economic situation, and the trend of interest rates has an important impact on market changes. Figure 2 is a chart of the trend of the S&P 500 Index in recent years. The Standard & Poor's 500 is an index that includes 500 large companies in the United States, including Apple (accounting for 6.50%), Microsoft (5.53%), Amazon (2.49%), Tesla (1.51%), Exxon (1.35%), etc. Since the assets are dispersed in 500 well-known large companies, compared with buying only one company's stock, the risk of investment is greatly reduced.

As can be seen from Figure 2, since reaching its all-time high of 4,800 at the end of 2021, the S&P 500 has fluctuated all the way down. The well-known rule of stock market trading is "buy low and sell high". If you can buy at the "bottom", that is of course the best choice. The problem is, no one knows exactly when the real bottom is. I don't know, you don't know, and Warren Buffett said he doesn't know either. There is a saying in the stock market, "do not time the market", which means don't guess when it is the bottom and when it is the peak. This is the reason.

However, this does not stop people from continuing to speculate, it seems that this is determined by the weakness of human nature. Careful observation of Figure 2 shows that there have been at least 6 "bottoms" since 2022. After passing through a bottom, it rebounded sharply, then fell sharply, and then rose sharply. The bad thing is that with the exception of the most recent "bottom" 6, every subsequent "bottom" is lower than the previous one! This is a so-called "bear market rally."

Figure 7. Comparison of the trend of medium-term treasury bond VGIT and medium-term corporate bond VCIT before and after the market crash in March 2020.

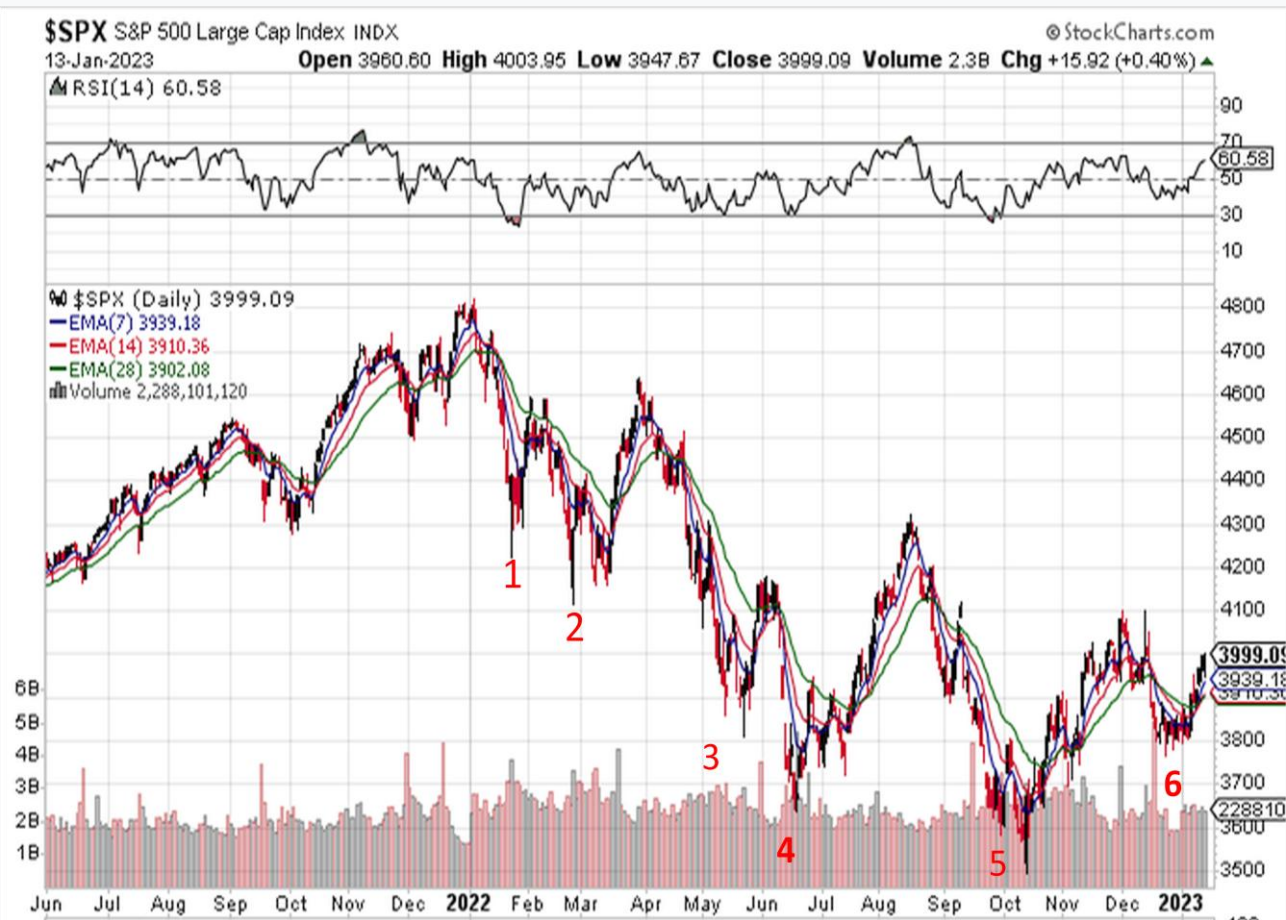


Figure 2. Trends of the S&P 500 Index in recent years.

Maybe "6" is the real "bottom". On January 13, 2023, the S&P 500 index has rebounded to 3,999 points, but some Wall Street experts predict that it may drop to about 3,000 points in 2023. More aggressive readers might want to buy some S&P 500 index funds or individual stocks now, while more conservative investors might be better off waiting for a while.

3. Bond Market Analysis

So, besides the stock market, are there any other investment opportunities in 2023? Of course there is, that is the bond market. For basic knowledge about bonds, please refer to the second half of "3. Investment Approaches and Risks" in the "Investment Basics" I published a few days ago. What I want to emphasize here is that when I talk about investing in the bond market in this article, I don't mean buying individual bonds. A certain bond, such as a 30-year bond issued by the U.S. federal government, has the principal amount and interest rate printed on it. The principal and interest can be recovered 30 years after the

purchase, and there is no risk, unless the federal government collapses or goes bankrupt. Therefore, this kind of investment is generally called "fixed income investment".

However, this article is not talking about this kind of bond investment. Who wants to wait 30 years before withdrawing and realizing it? What I want to talk about in this article is to buy and sell bond ETFs (Exchange Trade Fund) in the bond market. Although you buy 30-year treasury bond ETF, you don't have to wait until 30 years later to cash it out. You don't even have to wait until 30 days, in fact, you can sell in 3 hours if you want to. As for the price at the time of selling, it will follow the market, which can only be determined by supply and demand in the market. Some investment companies still refer to this type of investment as "fixed income investment". However, such a statement is extremely easy to mislead investors, because the result of the transaction may be profitable or loss, it is not fixed at all.

Figure 3 shows the trend of iShare's TLT (Treasury bond fund with a maturity of more than 20 years) in recent years. The time frame is exactly the same as for the S&P 500 in Figure 2. It can be seen from Figure 3 that TLT has been falling all the way since it peaked at 154.35 on November 29, 2021. But the process of going lower is much simpler than the S&P 500. TLT doesn't have as many peaks and bottoms, and its 92.4 on October 24, 2022 is likely to be a real "bottom". Since then, it has rebounded strongly, reaching 108 at one point, then dropping to 100, before bouncing back to 107 on January 13, 2023. The recent uptrend of TLT and other short-, medium-, and long-term bond ETFs has been quite strong, closing at the highest share price almost every day. From this we estimate that the upward trend is greater than the downward trend since then. There are reasons to think that bond ETFs will be a better investment avenue in 2023.

As we all know, the value of bonds moves inversely with changes in interest rates. A rise in interest rates causes the value of bonds to fall, and conversely, a fall in interest rates causes the value of bonds to rise. As mentioned above, the Federal Reserve started raising interest rates in mid-March 2022, and increased the rate from mid-June to early November in an unprecedented manner. So why, under such a harsh background, do we still see three distinct rises in TLT's share price? (First, from mid-June to early August; second, from early November to early December; third, from the end of December to the present.) Isn't this contrary to common sense?

In fact, the trend of the securities market is not in sync with the current economic situation, it is forward-looking, roughly half a year to one year ahead of the current economic situation. That is to say, the current market focuses on the economic trend in the next six months to one year. Specifically, the current market trend (in mid-January 2023) reflects the future US economic situation in the second half of 2023. As mentioned earlier, the Federal Reserve will further increase the benchmark interest rate to 5% in 2023. And this interest rate increase will be completed before the summer of 2023, after which it will maintain high interest rates for a period of time, and by the end of 2023 or early 2024, the Fed will have to start

cutting interest rates to prevent an excessive economic recession. Once the interest rate hike is stopped, it will bring significant benefits to the bond market and become a strong driving force for bond prices to rise.

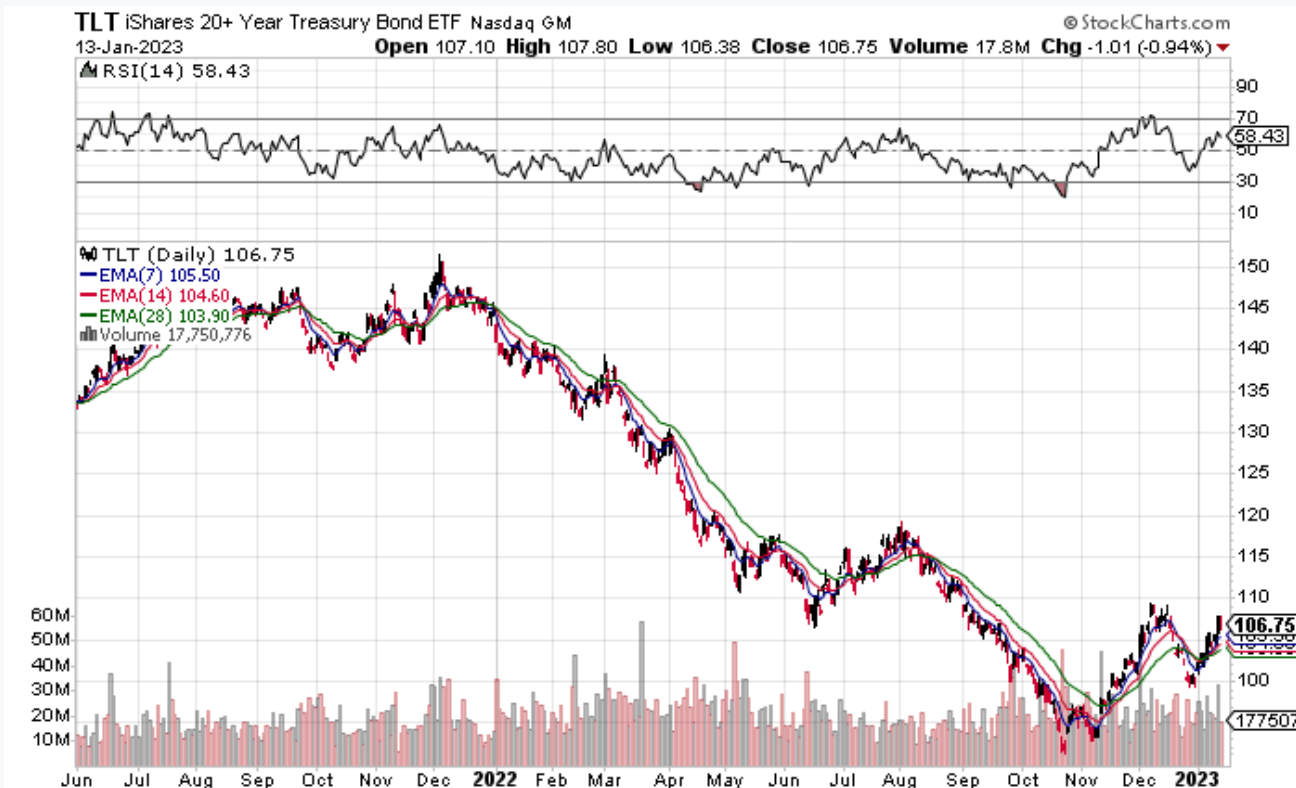


Figure 3. The trend of iShare's TLT (Treasury Bond Fund with a maturity of more than 20 years) in recent years.

Therefore, the rebound in the bond market since November 2022 reflects the market's economic expectations for the US in the summer of 2023 more than half a year later. Of course, economic development is ever-changing, and expectations are just expectations. The actual situation depends on many other factors, including political factors, such as the war between Russia and Ukraine, the situation in the Taiwan Strait, the Korean Peninsula, the epidemic in China, and many other hot spots. Therefore, the bond investment called "fixed income (Fixed Income) investment" is actually far from fixed, and investors must be prepared for this.

Figure 4 below is a partial enlargement of Figure 3, emphasizing the trend of TLT after the Fed's strong interest rate hike in March 2022.



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So, what kind of income can be obtained by investing in the bond market in 2023? For this reason, let us still take TLT as an example and take a look at the share price trend of the bond market in the past 20 years (Figure 5). It can be seen from Figure 5 that

- (1) The general trend of TLT in the past 20 years has been rising volatility, at least until mid-2021;
- (2) After a sharp rise from 2019 to 2021, it will fall sharply, but this may also be a rare investment opportunity for investors in 2023;
- (3) During the 18 years from 2003 to 2021, the latter major peak value of the stock price is always higher than the previous peak value, and the latter major valley value is also higher than the previous valley value. This is determined by the general upward trend;

Given that the general trend of the U.S. securities market over the years has been upward, there is no reason to believe that the sharp decline in bond market prices after 2022, as shown in Figure 5, will not be reversed. It is more likely that it is only an episode in the entire upward process, a possible episode of rare opportunity for investors.

Table 2 in the third section summarizes the peak value, bottom value, decline rate, current value (January 13, 2023), rebound rate, 2023 return, and Future upside comparison. From the comparison in Table 2, it can be seen that the rebound rate and future growth potential of long-term treasury bonds are better than those of the S&P 500. 11.6%, while the first three have reached 6.6% to 9.8% in just a few days until January 13, 2023, while the S&P 500 is only 4.57%. It can be seen that, at least from the perspective of the trend in early 2023, the upward momentum of the long-term treasury bond ETF has surpassed the S&P 500, which is better than the stock market.

On the other hand, we should also understand that the investment risk of long-term Treasury bond ETF is much lower than that of S&P 500 and any single stock. Because treasury bonds are issued by the U.S. federal government, a single treasury bond must be repaid with interest after the predetermined period expires. There has never been any breach of contract in history. Although the share price of treasury bond ETFs fluctuates with the market, investors' income is not guaranteed. Investors may make profits or losses when they sell their treasury bond ETFs. However, it is backed by the federal government after all, unless the U.S. federal government collapse or declare bankruptcy. Otherwise, the value of the treasury bond ETF is absolutely impossible to return to zero.

In contrast, it is not impossible for any American company, no matter how prestigious it is in history, to go bankrupt. For example, Lehman, General Motors, and Kodak have all declared bankruptcy. Once bankruptcy and reorganization, it is possible for the stock price to halve or even return to zero. So from this perspective, the risk of investing in U.S. Treasury bonds is relatively lower than that of the stock market.

3. Investment Opportunities in 2023

It is generally believed that bond ETFs are less volatile than stock or stock ETFs, and this is a general rule. However, we must also see that the stock price volatility of long-term government bond ETFs may also be quite violent, which can be confirmed from Figure 6. In fact, the EDV of ultra-long-term government bonds is more volatile than the TLT of 20+ year government bonds. In short, the longer the term of the bond and the higher the yield, the greater the volatility of its share price. This is a general rule.



Figure 5. The trend of TLT (Treasury Bond Fund over 20 years) in the past 20 years

Table 2. Comparison of some representative bonds and the peak value, valley value, decline rate, current value, rebound rate, 2023 earnings, and future upside of some representative bonds and the S&P 500 around 2022.

Name	Type	Peak	Bottom	Drop from Peak	Current Price (1/13/23)	rebound	Return of 2023	Future Potential
EDV	Extended Treasury	\$175.91	\$74.24	-57.80%	\$90.05	21.30%	9.79%	95.35%
TLT	Long term Treasury	\$171	\$93.17	-45.50%	\$106.75	14.60%	5.21%	60.19%
VGLT	Long term Treasury	\$104.06	\$57.38	-44.90%	\$65.73	14.60%	6.62%	58.31%
VGIT	Mid term Treasury	\$70.82	\$57.14	-19.30%	\$59.77	4.60%	2.24%	18.49%
VGSH	Short term Treasury	\$62.28	\$57.43	-7.80%	\$58.17	1.30%	1.14%	7.07%
VCLT	Long term Corp	\$112.38	\$75.71	-32.60%	\$81.34	7.40%	7.45%	38.16%
VCIT	Midterm Treasury	\$97.14	\$74.02	-23.80%	\$80.22	8.40%	3.50%	21.09%
VCSH	Short term Treasury	\$83.25	\$73.61	-11.60%	\$76.07	3.30%	1.14%	9.44%
\$SPX	S&P500	\$4,766.28	\$3,583.07	-24.80%	\$3,999.09	11.60%	4.57%	19.18%

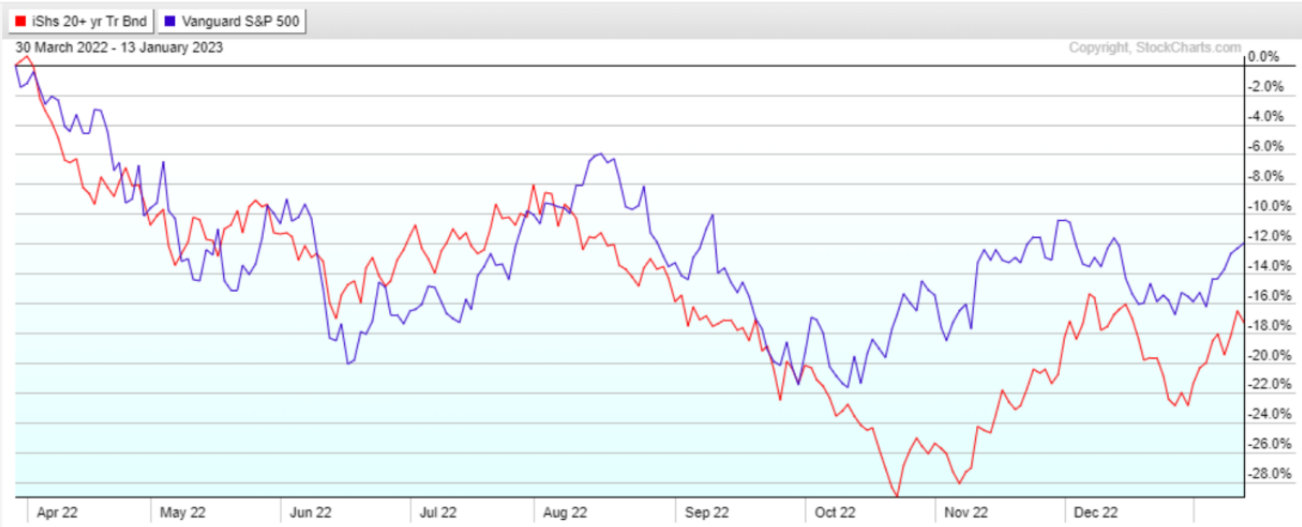


Figure 6. Comparison of long-term Treasury bond TLT (red curve) and S&P 500 (blue curve) stock price volatility.

Do you still remember the Black Monday of the US stock market crash on March 16, 2020. On that day, the Dow Jones Industrial Index triggered the third circuit breaker mechanism within two weeks immediately after the opening of the market. It fell sharply by 2250.46 points, or 9.71%. The S&P 500 index fell 324.89 points, or 11.98%. The stock market is like this, how about the bond market in those few days?

Figure 7 below compares the trend of medium-term treasury bond VCIT (red line) and medium-term corporate bond VCIT (blue line) in one and two years before and after that date. U.S. bonds can be divided into corporate bonds, government bonds, and treasury bonds according to the different issuing units. As the names suggest, corporate bonds are issued by individual corporations, government bonds are issued by federal, state, and municipal government agencies, and treasury bonds are issued by the Treasury Department of the federal government. Generally speaking, corporate bonds have the highest yield and are relatively risky, while government bonds have the lowest yield but are relatively safest.

It can be seen from Figure 7 that during the two months before and after Black Monday in 2020, the stock price of the corporate bond VCIT fluctuated greatly, falling by more than 20%. On the contrary, before Black Monday, the VGIT of the national debt rose sharply for several days, and in the few days on March 16, the stock price only fluctuated slightly, and it seemed to me that I would not move. This fully demonstrates that the stability and hedging properties of national debt are unmatched by any other stocks and bonds.

It is for this reason that if you plan to invest in the US bond market in 2023, I strongly suggest that you would rather accept a slightly lower yield and invest in Treasury bonds issued by the Treasury

Department rather than corporate bonds or other government agencies of bonds. This is especially important for people with poor psychological endurance or older investors.

4. Recommended U.S. Treasury Bonds to Consider Buying in 2023

If you want to invest in U.S. Treasury bonds in 2023, ETFs to consider are listed in Table 3. The dividends in the table are the last 30-day average of the annual dividends payable to investors by the ETF. Because the stock price changes every day, every hour, and even every minute. An increase in the stock price leads to a decrease in the dividend, so only an average is given. Taking VGLT as an example, the dividend is 3.82%. That is to say, assuming that the stock price remains unchanged, the annual dividend received by VGLT investors is 3.82%. But in fact, the main income of investors comes from the rise of stock prices, and the monthly dividends only account for a small part of the income.

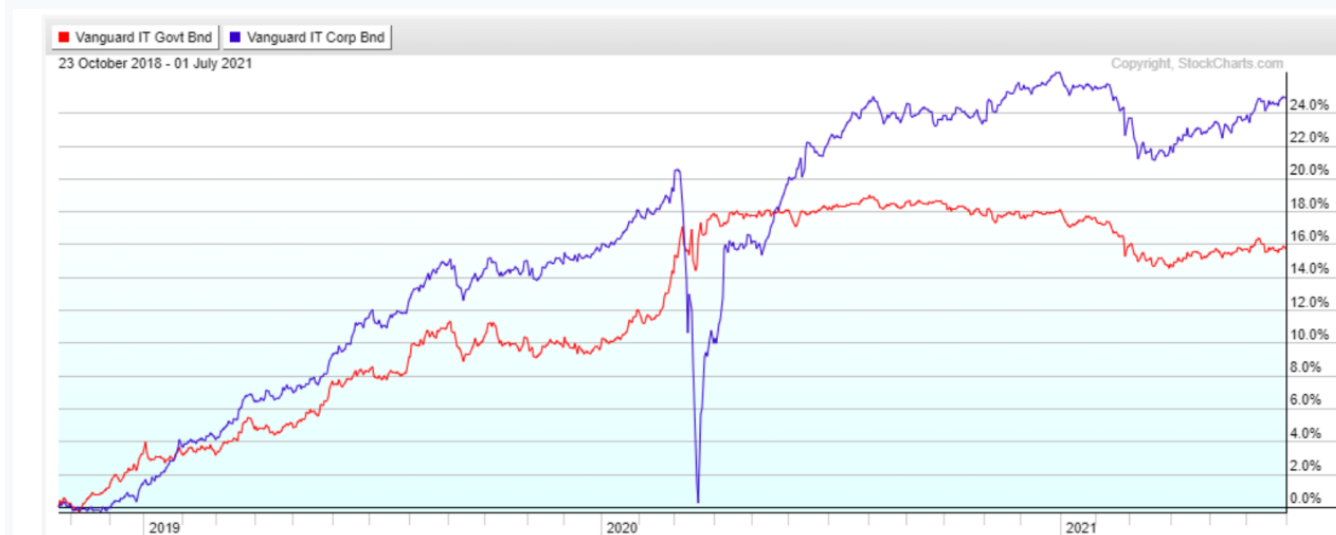


Figure 7. Comparison of the trend of medium-term treasury bond VGIT (red curve) and medium-term corporate bond VCIT (blue curve) before and after the market crash in March 2020.

Table 3 presents an overview of U.S. Treasury bonds that may be considered for purchase. The "annual fee" in the table refers to the management operation fee collected by the company issuing the ETF from investors every year. The annual fee of ETFs is very low, especially Vanguard is famous for its ultra-low management fee, which is only 0.04%/year. That is to say, if you invest \$10,000 in VGLT, the annual management fee charged by the company is only \$4. The management fee of a traditional mutual fund is about 1%.

In recent years, securities transactions of major investment companies in the United States have been executed free of charge. In addition, another advantage of investing in ETFs is that the investment starting point is low. At least one share is enough. For example, the current VGLT stock price is \$65.73, and you can buy one share for less than \$100. In the past, the starting point for opening a mutual fund account was several thousand dollars.

Table 3. US Treasury bonds to consider buying.

Name	Type	Dividend	Annual Fee	Transaction Fee	ETF Issuer
EDV	Ultra Long Term	3.82%	0.04%	\$0	先锋公司
TLT	Long Term	2.54%	0.15%	\$0	黑石公司
VGLT	Long Term	3.82%	0.04%	\$0	先锋公司
VGIT	Midterm	3.79%	0.04%	\$0	先锋公司
VGSH	Short Term	1.14%	0.04%	\$0	先锋公司

For the convenience of readers, the website of Pioneer Company is given as follows:

vanguard.com

You can apply for an account after going online, and all operations are performed online. Investors from Mainland China should have no problem accessing vanguard.com, but the speed may be slightly slower. If you have a problem with English, you can use the Baidu translation function to help. Investors in mainland China only need to open a US dollar account in a domestic bank, and then link the account of the Bank of China with the account of Pioneer to conduct investment operations. Pioneer also has a branch in Shanghai. I don't know if it is feasible to conduct transactions through the branch. Even if it is feasible, I am afraid that additional fees will be charged, which seems unnecessary.

5. When to Buy and Sell

Now that you know what to buy, when should you buy it? And when should it be sold? Since the new year, in just nine trading days, Vanguard's long-term VGLT has grown by 6.62%, while its ultra-long-term EDV has increased by 9.79% (see Table 2), and, as mentioned earlier, almost every trading day, the final closing price is close to or equal to the highest price of the day, showing a rare upward momentum. "When to buy? I said in the previous "Investment Thoughts", "If someone asks me, when is the best time to invest?" My answer is, today, at this moment, at this moment. "

Therefore, you should buy on the first trading day of this week, January 17, 2023! (January 16 is a national holiday, Martin Luther King Day, and the market is closed). Of course, you can't buy too much at one time, it's better to enter the market in batches and multiple times. Then wait until February 1st, the next day when the Fed will raise interest rates. If the Fed slows down the rate hike and only raises interest rates by 0.25%, you can buy more. Wait until the summer of 2023, if you stop raising interest rates, you can take advantage of the trend to buy more. Later, when the Fed starts to cut interest rates, then you can buy the upper limit of your original plan. Of course, if you are an experienced investor with a certain degree of foresight, the above operations can be carried out in advance.

When will it be sold? When the next economic cycle is approaching, the economy is overheating, and the Fed is about to brake (raise interest rates), it may be time to sell and increase cash reserves. Regarding selling, there is an important rule: when the market crashes, the public panics, and they have to cut their meat, leave the market, save capital, and save their lives, you must grit your teeth and insist on not selling. Because, even if the stock price falls sharply and the loss is serious, it is only a "paper loss" rather than a real loss. The amount of stocks or bonds you actually own has not changed at all, and the reduced stock price will always be lost sooner or later. will recover. There are also experienced investors who don't care about the short-term fluctuations in stock prices, calling them "background noise", and only pay attention to the general trend of the economy and the market, and only conduct a few buying and selling operations every quarter or even every year, which is even more wise. and efficient investment operations.

6. Conclusion

- (1). Investing in U.S. Treasury bonds in 2023 may be a rare high-yield, low-risk investment opportunity;
- (2). It may be a better choice to buy Vanguard's long-term treasury bonds EDV, VGLT, or Blackstone's TLT; more conservative investors may also consider buying Pioneer's medium-term treasury bonds VGIT or Blackstone's TLH, IEF, etc. to avoid The stock price fluctuates greatly, but the income is naturally correspondingly low.
- (3). Money market funds (MM) can also be partially replaced by lower-risk short-term treasury bonds VGSH or SHY to obtain slightly higher returns than the latter;
- (4). If treasury bond can return to the previous peak within one or two years, the future yield of long-term national debt will reach 60% to 95%, and medium-term national debt will reach about 20%. And historical experience shows that there is no peak that cannot be surpassed.
- (5). If the stock market rises further, indicating that 6 in Figure 2 is likely to be a "true bottom", you can add stocks and buy S&P 500 ETFs, such as Vanguard's VOO, or other companies' IVV, SPY, and some outstanding individual stocks, gradually establish an investment structure that takes into account the balance of stocks, bonds, and cash;
- (6). When the economy enters the next boom period, you can consider converting some government bonds into corporate bond ETFs, such as VCLT and VCIT, in order to obtain slightly higher yields.

Finally, I would like to emphasize the following disclaimer:

"The bond market is risky, and investment needs to be cautious." This article is only the author's personal investment experiences, and errors are inevitable. Therefore, it cannot be used as any investment advice. Any investment income of anyone is entirely owned by the investor, and any investment mistakes and losses are also fully borne by the investor himself, and have nothing to do with the author of this article.

Shi Hong, 2023, January 16, third draft, Suwanee, Georgia.