



Credit Suisse High Yield Bond Fund – DHY (5/22/19)

Description: Credit Suisse High Yield Bond Fund is a closed ended fixed income mutual fund launched and managed by Credit Suisse Asset Management, LLC. The fund invests in the fixed income markets of the United States. It invests in the securities of companies across diversified sectors. The fund primarily invests in below-investment-grade corporate bonds with an average credit quality lower than BBB by Standard & Poor's and an average duration of 5.07 years. It focuses factors like financial condition, cash flow and borrowing requirements, value of assets in relation to cost, strength of management, responsiveness to business conditions, credit standing and anticipated results of operations to make its investments. The fund benchmarks the performance of its portfolio against the BofA Merrill Lynch High Yield Master II Constrained Index. Credit Suisse High Yield Bond Fund, Inc. was formed on July 31, 1998 and is domiciled in the United States.

Ticker: DHY

Performance: +16.1% YTD

Analysis

DHY is an investment vehicle that is used to diversify your portfolio into high yield, “junk”, bonds. DHY is not an exchange traded fund (ETF), it's a closed-end mutual fund meaning that at the start of the creation of the fund the money was raised and no more shares in DHY were issued. As a result, and unlike open-end mutual funds, closed-end funds trade in the secondary market throughout the day and are similar to ETFs in this regard.

Investing in DHY is pretty simple. You're investing in the security because you want to accomplish the following things:

1. Diversify & Optimize portfolio
2. Seek higher returns with more risk than government bonds

High-yield is something CUBE plans on adding to the CUBEFolio sometime in the future. It is a great way of diversifying your holdings, as we'll explain in a bit, and has also been a pretty solid performing asset class over the years.

Asset Class Returns

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
REIT 31.6%	EM 34.5%	REIT 35.1%	EM 39.8%	HG Bnd 5.2%	EM 79.0%	REIT 28.0%	REIT 8.3%	REIT 19.7%	Sm Cap 38.8%	REIT 28.0%	REIT 2.8%	Sm Cap 21.3%	EM 37.8%	Cash 2.0%
EM 26.0%	Int'l Stk 14.0%	EM 32.6%	Int'l Stk 11.6%	Cash 1.4%	HY Bnd 57.5%	Sm Cap 26.9%	HG Bnd 7.8%	EM 18.6%	Lg Cap 32.4%	Lg Cap 13.7%	Lg Cap 1.4%	HY Bnd 17.5%	Int'l 25.6%	HG Bnd 0.0%
Int'l Stk 20.7%	REIT 12.2%	Int'l Stk 26.9%	AA 7.6%	AA -22.4%	Int'l Stk 32.5%	EM 19.2%	HY Bnd 17.9%	Int'l Stk 23.3%	Int'l Stk 23.3%	AA 6.9%	HG Bnd 0.6%	Lg Cap 12.0%	Lg Cap 21.8%	HY Bnd -2.3%
Sm Cap 18.3%	AA 8.9%	Sm Cap 18.4%	HG Bnd 7.0%	HY Bnd -26.4%	REIT 28.0%	HY Bnd 15.2%	Lg Cap 2.1%	Sm Cap 16.4%	AA 11.5%	HG Bnd 6.0%	Cash 0.1%	EM 11.6%	Sm Cap 14.7%	REIT -4.0%
AA 14.1%	Lg Cap 4.9%	AA 16.7%	Lg Cap 5.5%	Sm Cap -33.8%	Sm Cap 27.2%	Lg Cap 15.1%	AA 0.3%	Lg Cap 16.0%	HY Bnd 7.4%	Sm Cap 4.9%	Int'l Stk -0.4%	REIT 8.6%	AA 14.6%	Lg Cap -4.4%
Lg Cap 10.9%	Sm Cap 4.6%	Lg Cap 15.8%	Cash 4.4%	Lg Cap -37.0%	Lg Cap 26.5%	AA 13.5%	Cash 0.1%	HY Bnd 15.6%	REIT 2.9%	HY Bnd 2.5%	AA -1.3%	AA 7.2%	REIT 8.7%	AA -5.6%
HY Bnd 10.9%	Cash 3.2%	HY Bnd 11.8%	HY Bnd 2.2%	REIT -37.7%	AA 24.6%	Int'l Stk 8.2%	Sm Cap -4.2%	AA 12.2%	Cash 0.1%	Cash 0.0%	Sm Cap -4.4%	HG Bnd 2.7%	HY Bnd 7.5%	Sm Cap -11.0%
HG Bnd 4.3%	HY Bnd 2.7%	Cash 4.7%	Sm Cap -1.6%	Int'l Stk -43.1%	HG Bnd 5.9%	HG Bnd 6.5%	Int'l Stk -11.7%	HG Bnd 4.2%	HG Bnd -2.0%	EM -1.8%	HY Bnd -4.6%	Int'l Stk 1.5%	HG Bnd 3.5%	Int'l Stk -13.4%
Cash 1.4%	HG Bnd 2.4%	HG Bnd 4.3%	REIT -15.7%	EM -53.2%	Cash 0.2%	Cash 0.2%	EM -18.2%	Cash 0.1%	EM -2.3%	Int'l Stk -4.5%	EM -14.6%	Cash 0.3%	Cash 1.0%	EM -14.3%

Abbr.	Asset Class – Index	Annual	Best	Worst
Lg Cap	Large Cap Stocks – S&P 500 Index	7.77%	32.4%	-37.0%
Sm Cap	Small Cap Stocks – Russell 2000 Index	7.49%	38.8%	-33.8%
Int'l Stk	International Developed Stocks – MSCI EAFE Index	5.22%	32.5%	-43.1%
EM	Emerging Market Stocks – MSCI Emerging Markets Index	8.26%	79.0%	-53.2%
REIT	REITs – FTSE NAREIT All Equity Index	8.52%	35.1%	-37.7%
HG Bnd	High Grade Bonds – Barclay's U.S. Aggregate Bond Index	3.87%	7.84%	-2.0%
HY Bnd	High Yield Bonds – BofAML US High Yield Master II Index	7.13%	57.5%	-26.4%
Cash	Cash – 3 Month Treasury Bill Rate	1.25%	4.7%	0.0%
AA	Asset Allocation Portfolio*	6.67%	24.6%	-22.4%

Past performance does not guarantee future returns. The historical performance shows changes in market trends across several asset classes over the past fifteen years. Returns represent total annual returns (reinvestment of all distributions) and does not include fees and expenses. The investments you choose should reflect your financial goals and risk tolerance. For assistance, talk to a financial professional. All data are as of 12/31/18.
 *Asset Allocation Portfolio is made up of 15% large cap stocks, 15% international stocks, 10% small cap stocks, 10% emerging market stocks, 10% REITs, 40% high-grade bonds, and annual rebalancing.

HY Bonds from 2004-2018, returned an average of 7.13% annually with the best year being in 2009 with a 57.5% return and the worst being in 2008 with a -26.4% return. One thing we find pretty interesting here, and it should be highlighted, is that HY outperformed Small Caps, Large Caps, Real Estate Investment Trusts, International Stocks, and Emerging Markets during the 2008 financial crisis and bounced back better than every asset class excluding Emerging Markets in 2009.

Last year, HY didn't perform too well falling 2.3% but this once again outperformed a majority of asset classes. The reason HY fell was because interest rates were hiked 4x during the year. In the exact opposite way, DHY is up over 16% this year because interest rate hikes have been put on hold and there are even talks circling that we could see rate cuts again which would push HY even higher.

Adding to the data above, we also see HY's risk adjusted returns via the Sharpe Ratio. From 1993 to 2017, and very similar to the chart above with the timeframe being 2004-2018, HY also returned 7.77% annually. What's more interesting though, and we mention this frequently, is that HY has a very high Sharpe Ratio. For those not aware, the Sharpe Ratio is calculated the following way:

The Formula for Sharpe Ratio Is

$$\text{Sharpe Ratio} = \frac{R_p - R_f}{\sigma_p}$$

where:

R_p = return of portfolio

R_f = risk-free rate

σ_p = standard deviation of the portfolio's excess return

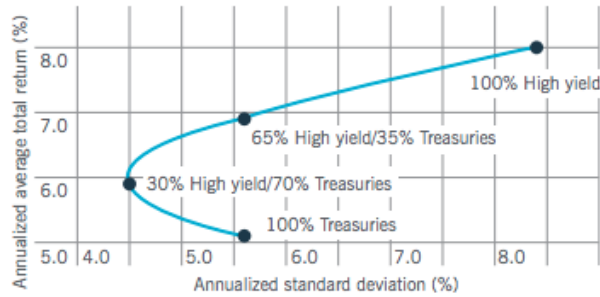
In easier terms, it is the excess return generated over the risk-free rate (generally 10YR Treasury) divided by the asset's standard deviation (how volatile it is). Like we always say, your return is only as good as the risk you are taking on.

1993 – 2017	Returns (%)	Standard deviation (%)	Sharpe ratio
High-Yield Bonds	7.77	8.06	0.65
Investment-grade corporate bonds	6.38	5.14	0.75
Large-cap stocks	9.69	14.15	0.51
Small-cap stocks	9.54	18.55	0.38

Data for the period 01 Jan 1993 – 31 Dec 2017. Performance data reflect the following indexes: ICE BofA Merrill Lynch US Cash Pay High Yield Index, ICE BofA Merrill Lynch US Corporate Index, S&P 500 Index, Russell 2000 Index. It is not possible to invest in an index. Performance for indexes does not reflect investment fees or transactions costs.

Source: FactSet.

As we can see, the Sharpe Ratio seen in HY was higher at 0.65 vs. that of large cap and small cap stocks over the 24-year period. Just to make it a little more obvious, HY garnered 7.77% returns on a standard deviation of 8.06% while small caps garnered less than 2% more in returns but took on over 10% more standard deviation.

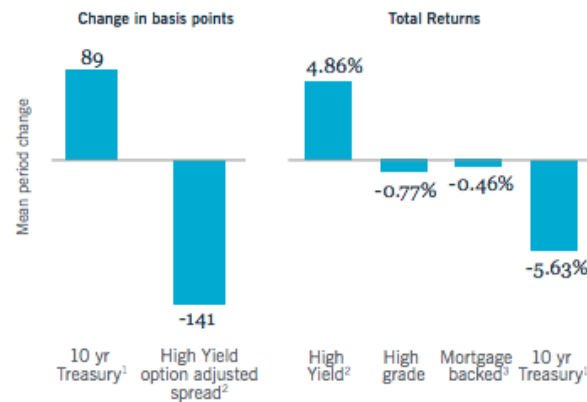


Data for the period 01 Jan 1993-31 Dec 2017, based on the following indexes: ICE BofA Merrill Lynch US High Yield Index, and ICE BofA Merrill Lynch Current 5-year and 10-year US Treasury Index, as measured from 01 January 1993, through 31 Dec 2017. Based solely on historical returns and standard deviations. It is not possible to invest in an index. Performance for indexes does not reflect investment fees or transactions costs.

Source: BofA Merrill Lynch Global Research.

Adding to this, the chart above is showing the annualized returns for a bond portfolio with different weights between HY and U.S. Treasuries vs. the standard deviation of the portfolio from 1993 to 2017. What we notice in this diagram is that the optimal bond portfolio, best risk/reward tradeoff, over the 24-year span was a 30% weight in high yield and 70% in Treasuries. You're most certainly able to weight your portfolio however you'd like but we figured we'd shine some light over these stats.

Average bond performance during 16 periods of rate increases: 1998–2017.



1 ICE BofA Merrill Lynch 10-year US Treasury Index, 2 ICE BofA Merrill Lynch US Cash Pay High Yield Index, 3 ICE BofA Merrill Lynch US Mortgage Backed Securities Index. It is not possible to invest in an index. Performance for indexes does not reflect investment fees or transactions costs.

Sources: Nuveen, BofA Merrill Lynch Global Research, and Bloomberg.

The chart above is showing that HY bonds outperformed their fixed income peers over the course of periods with higher interest rates. We know that rates have been on the rise over the last couple of years and in the case that the Fed does decide to pick up where they left off in 2018, HY should do better than other fixed income products if history is any indicator. By the looks of it, the economy has been growing pretty well and that generally infers rate increases will be on the horizon but shockingly enough inflation has been pretty

weak and trade issues with China have put the Fed on a pause. According to our 2019 Yearly Outlook, CUBE expected only one rate hike this year vs. expectations by the Street for two. If we had to say now, it looks more likely we won't see any hikes this year and do not believe we'll see a rate cut in 2019.



The chart above is also very important. What we're looking at is the spread between high yield bonds and Treasuries. This is the premium investors are paid, or the average spread, of U.S. corporate "junk" bond yields over Treasury debt and it currently stands at 4.06%. The spread has fallen considerably since the start of 2019, falling from 5.5% to a tad bit above 3.5% and has since recouped.

A bottom in spreads tends to precede recessions. A low of 2.41% was recorded on July 1 2007, five months before the start of the subprime mortgage market crisis. The spread spiked during the recession that followed the meltdown of late 2008 as seen in the longer-dated chart below. This happened because people demand more return in more dangerous economic environments to compensate for that risk against safer U.S. government debt.



Looking more specifically at DHY, what we see is that the fund is pretty well diversified as seen by some of their top holdings:

Symbol	Name	% Weight
--	Euramax International, Inc. 12%	1.33%
--	LPL Holdings Inc. 5.75%	1.21%
--	Compass Group Diversified Holdings LLC 8%	1.05%
--	NFP Corp. 6.88%	1.03%
--	Taseko Mines Limited 8.75%	1.01%
--	Gtt Communications Inc 7.88%	1.01%
--	Shelf Drilling International Holdings, Ltd. 8.25%	0.99%
--	Solera, LLC / Solera Finance, Inc. 10.5%	0.98%
--	PriSo Acquisition Corp. 9%	0.95%
--	Trimas Corporation 4.88%	0.91%
--	Gateway Casinos & Entertainment Limited 8.25%	0.90%
--	Golden Nugget Inc 6.75%	0.89%
--	FTS International Inc 6.25%	0.88%
--	ZIGGO B.V. 5.5%	0.87%
--	VFH PARENT LLC / ORCHESTRA CO-ISSUER INC 6.75%	0.87%
--	ACRISURE LLC / ACRISURE FIN INC 7%	0.86%
--	Bausch Health Companies Inc 5.88%	0.82%
--	H&E Equipment Services, Inc. 5.62%	0.82%
--	WeWork Companies Inc 7.88%	0.81%
--	Jefferies Finance LLC/JFIN Co-Issuer Corp 7.5%	0.81%
--	ESH Hospitality, Inc. 5.25%	0.81%
--	Bausch Health Companies Inc 7%	0.80%
--	Eldorado Gold Corp 6.12%	0.79%
--	Midcontinent Communications/Midcontinent Communications Finance Corp 6.88%	0.77%
--	SFR Group 6.25%	0.77%

As of April 30, 2019

DHY has a decent amount of weight in commodities, casinos, real estate, and financials as seen by the bonds they hold in Shelf Drilling, Taseko Mines, Eldorado Gold Corp, Gateway Casinos, Golden Nugget, WeWork, Jefferies, etc.

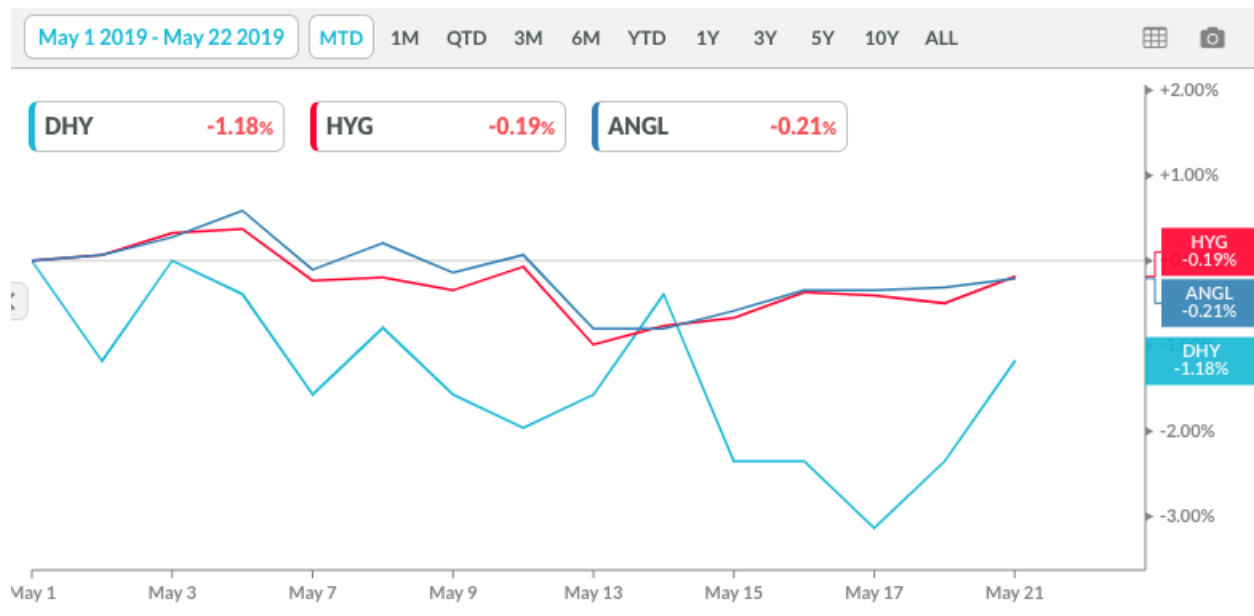
One of the downsides to DHY, and it really is a deal breaker for us, is that DHY is a pretty expensive fund to hold.

Fees and Expenses DHY	
Total Expense Ratio Reported	2.59%
Interest Expense	1.18%
Top 3 Expenses	
Advisor Fee	1.31%
Legal Fee	0.06%
Director Fee	0.05%
Total Expense Ratio Adjusted	2.59%

At 2.59%, DHY is considerably more expensive than other bond funds we've covered. Speaking of them, please be sure to view the 20+ page bond ETF document we put together that's currently in the Vault.

For comparison, the average high yield bond fund benchmark is around 0.41% with one of the most popular one's being HYG at 0.49%.

Let's now look at some comparisons performance wise.



DHY has been underperforming two very popular high yield bond ETFs in HYG and ANGL on a MTD basis but outperforming drastically on a 3-month basis.



On a 6-month timeframe, DHY still holds a comfortable lead but begins to lag at 1YR and beyond.



The gap begins to widen mightily the further we go out as we can see from the 3YR chart and even more so on the 5YR chart.



***Note that these returns are before fees so that annual 2.49% fee on DHY definitely adds up over time.

All in all, we like the thought of owning HY but we personally wouldn't choose DHY due mainly to the fees as well as the odd long-term underperformance vs. other bond ETFs.

As a reminder, please view the bond ETF report we created as it will present a lot of alternative opportunities in your quest for fixed income securities and allocation!