

Sharpe Ratio – 6 Things You Need to Know

In this article, I will cover the Sharpe ratio indicator and if it's something you can use to track your trading performance. While this ratio is often used for institutions, you can also use it to raise your game. Remember, even if you are trading out of your home, you need to treat your trading like a business.

Sharpe Ratio Overview

The ratio measures a fund or an individual's returns after factoring in risks. The ratio is named after its founder, William Sharpe, a [Nobel Laureate](#) winner.



William Sharpe

William Sharpe first mentioned the ratio in the 1966 paper titled **“Mutual Fund Performance”**.

In layman terms, for every one point of return; you are risking “x” units. In this statement, “x” represents the Sharpe Ratio which we will detail in the section below.

#1 – How to Calculate the Sharpe Ratio

The ratio is calculated by subtracting the 90-day Treasury bill (risk-free) return from the fund’s returns. If you are trading for yourself, replace the word fund with you.

The result is then divided by the fund’s standard deviation.

This resulting Sharpe ratio is expressed in a percentage basis.

For example:

- 12% return
- Standard deviation of 0.08
- T-bill return of 5%

$(0.12 - 0.05) / 0.08 = 0.87$ Sharpe ratio.

Another way of saying this is to achieve 1 point of return, you would risk 0.87 units.

#2- Comparing Funds

Let's say Fund A and B both have returns of 22%.

Fund A has a Sharpe ratio of 1.06 and Fund B has a Sharpe ratio of .98.

Which of these two funds offers a higher return when compensating for risk?

Since Fund A has a higher Sharpe ratio, we know that the Fund was able to achieve the same level of return with less risk.

An important distinction to make here is that a higher Sharpe ratio only measures the returns based on the risk.

The ratio does not speak to the level of volatility of the underlying asset.

#3 – How to Evaluate Investment Opportunities

The ratio is most known as a tool for selecting funds. As an example, check out the table below.

Each fund has an equal expense ratio. So, how do we determine the best fund to invest?

This is where the ratio comes into play. The WellsFargo:ST HY B (STYIX.0) has a Sharpe ratio of 1.49, which is the highest in the table.

This means the fund offers you better returns when adjusted for volatility.

Select	Name	Fund Universe	Total Net Assets (\$)	Total Expense Ratio (%)	Sharpe Ratio (%)
<input type="checkbox"/>	Fidelity Adv Ltd TB; EFIPX.O	Mutual Fund	559.0M	0.50	1.06
<input type="checkbox"/>	Payden:GNMA;Inv PYGNX.O	Mutual Fund	247.7M	0.50	1.36
<input type="checkbox"/>	Virtus:Low Dur Inc; HIBIX.O	Mutual Fund	220.2M	0.50	1.48
<input type="checkbox"/>	PIMCO:GNMA;Inst PDMIX.O	Mutual Fund	298.6M	0.50	1.42
<input type="checkbox"/>	Amer Cent:CA HY;Inv BCHYX.O	Mutual Fund	738.3M	0.50	1.32
<input type="checkbox"/>	AB Muni Nat;Adv ALTVX.O	Mutual Fund	451.5M	0.50	1.22
<input type="checkbox"/>	Lord Abbett Int TxFr; LAIIX.O	Mutual Fund	326.5M	0.50	1.02
<input type="checkbox"/>	Oppenheimer Core Bd; OPBIX.O	Mutual Fund	666.5M	0.50	1.17
<input type="checkbox"/>	WellsFargo:ST HY B;Inst STYIX.O	Mutual Fund	879.8M	0.50	1.49
<input type="checkbox"/>	WA Intermediate Bond; WATIX.O	Mutual Fund	280.9M	0.51	1.14
<input type="checkbox"/>	Ave Maria Bond AVEFX.O	Mutual Fund	255.8M	0.51	1.12
<input type="checkbox"/>	USAA Govt Sec;Fund USGNX.O	Mutual Fund	399.7M	0.51	1.02

Mutual Funds and ETF Screener (Source – Reuters Funds Screener)

#4 – Major Drawback of the Ratio

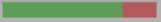
The biggest drawback of the ratio is the lack of volatility data.

For example, a fund could have a Sharpe ratio of 1.5. But what does 1.5 mean?

Again, this is based on the standard deviation of the indicator. Therefore, you could invest in a fund that purchases [leverage ETFs](#), hence the portfolio swings will be

greater.

Again, just looking at the ratio in isolation will leave out this glaring fact.

Advanced Statistics	Trades	Summary	Hourly	Daily	Risk Of Ruin	Duration		
Trades:		299	Longs Won:		(105/124) 84%	Profit Factor:		5.30
Profitability:			Shorts Won:		(129/175) 73%	Standard Deviation:		\$5.62
Pips:		7934.8	Best Trade(\$):		(Jun 16) 34.27	Sharpe Ratio:		0.3900
Average Win:		48.46 pips / \$4.20	Worst Trade(\$):		(Jun 16) -7.71	Z-Score (Probability):		-7.88 (99.99%)
Average Loss:		-52.37 pips / -\$2.85	Best Trade (Pips):		(Mar 16) 167.2	Expectancy:		26.5 Pips / \$2.67
Lots:		210.5	Worst Trade (Pips):		(Mar 16) -200.2	AHPR:		0.55%
Commissions:		0	Avg. Trade Length:		4d	GHPR:		0.54%

Key Financial Ratios

#5- Sharpe Ratio Limitations

Illiquid Assets

Illiquid assets can lower the overall portfolio's standard deviation, which can impact the Sharpe ratio.

Lagging Indicator

The Sharpe ratio accounts for the historical distribution of returns and volatility. Therefore, the ratio provides no indication or forecast of future risks and returns.

Treasury Market as Benchmark

Let me first say, you have to use some sort of benchmark in order to measure performance. With that said, should the Treasury markets be that benchmark?

There are some that feel the benchmark should be tied to the S&P 500. But remember, the goal for Sharpe was to identify a risk-free rate of return for measure.

#6- Should Day Traders Care About the Sharpe Ratio?

The ratio is a great indicator to track the volatility of a company.

However, as a day trader, I never see myself scrolling thru Sharpe ratios to determine whether I will pull the trigger.

Check out the below table to see if I'm lying.

Symbol Id	Name	Exchange	Close Price	Trade Date	Weekly Sharpe Ratio (12)	SMA (Volume 30)
NXRT	NEXPOINT RESIDENTIAL TRUST, INC.	NYSE	23.4800	23/01/2017	8.26	134,449.5333
GLAD	GLADSTONE CAPITAL CORP - BUSINESS DEVELOPMENT COM	Nasdaq GS	9.4600	23/01/2017	8.11	267,438.6333
NGL	NGL ENERGY PARTNERS LP COMMON UNITS REPRESENTING L	NYSE	24.0000	23/01/2017	7.90	586,787.1333
TGS	TRANSPORTADORA DE GAS DEL SUR SA TGS	NYSE	9.9600	23/01/2017	7.72	189,477.9667
BGB	BLACKSTONE / GSO STRATEGIC CREDIT FUND	NYSE	15.5300	23/01/2017	7.50	306,612.6667
SFL	SHIP FINANCE INTL LIMITED	NYSE	15.6500	23/01/2017	7.30	778,208.0667
CPB	CAMPBELL SOUP COMPANY	NYSE	63.1200	23/01/2017	7.19	1,451,707.8667
IHG	INTERCONTINENTAL HOTELS GROUP ADR (EACH REPRESENTI	NYSE	46.3300	23/01/2017	7.16	184,314.5667
MERC	MERCER INTL INC.	Nasdaq GS	11.4000	23/01/2017	6.83	126,181.5667
FRA	BLACKROCK FLOATING RATE INCOME STRATEGIES FUND INC	NYSE	14.5100	23/01/2017	6.68	225,996.9667
FMSA	FAIRMOUNT SANTROL HLDGS INC.	NYSE	12.3100	23/01/2017	6.61	3,517,599.5000
ARDC	ARES DYNAMIC CREDIT ALLOCATION FUND, INC.	NYSE	15.3700	23/01/2017	6.57	108,064.3667

Stock Screener

A better use of the ratio is to measure your own [day trading performance](#).

Log into your trading platform. Pull one of the custom reports and look for one that measures your Sharpe ratio.

Now, pull this number week over week to see how risky you are with your money.