SHARPE RATIOS

Simply Simple. in

vEcoSys

SHARPE RATIO

When you decide to buy a car what is it that you evaluate?

Is it only speed? size? fuel efficiency… or style, snob value, & other specific features (like four wheel drive) etc.?

SHARPE RATIO

- Chances are you look at most of these parameters before buying a car!

- Similarly even in a mutual fund scheme the buying decision should not be a function of a single parameter.

- But unfortunately most of us only look at “Returns” while evaluating a scheme

SHARPE RATIO

- As we all know, risk and return go hand in hand with investments.
- The higher the risks, the higher the gains and vice versa.
- So when you look at returns in an isolated manner, it becomes difficult to compare them as one does not get an idea of the risk taken to achieve these returns.

SHARPE RATIO

Hence, would you put in your hard earned money in a scheme that is No. 1 today but could disappear out of sight tomorrow, or would you put it on a scheme that is No. 3 but will maintain its position in the long run?

SHARPE RATIO

- Therefore, reliability of the scheme is a critical aspect.
- In the context of mutual fund schemes reliability is nothing but volatility.
- A scheme on one hand may give good returns but on the other hand if it turns out to be volatile or unreliable may not find favour with investors.
- Hence this calls for a measure of performance which takes into account both returns as well as volatility / reliability.

SHARPE RATIO

Sharpe Ratio is one such parameter which is both relevant and extremely significant while describing a fund's characteristics.

Sharpe Ratio expresses the relationship between performance of a scheme and its volatility.

Mathematically is can be expressed as:

$$\text{Sharpe ratio} = \frac{\text{Average returns}}{\text{Volatility}}$$

SHARPE RATIO

Therefore, it becomes important to evaluate the returns of the schemes for the same amount of risk.

SHARPE RATIO

Let me give you an example:

Say you wish to compare the performance of two students A & B in their annual exams.

Student A gets scores of 85, 60, 45, 100 & 60.

Student B, on the other hand, gets scores of 70, 75, 60, 60 & 80.

Who do you think performed better?

SHARPE RATIO

If we calculate their averages,

- **Student A: 85 +60+ 45 +100 + 60/ 5 = 350/5 = 70.**
- **Student B: 70 +75+ 60 +60 + 80/ 5 = 345/5 = 69.**

Here it looks like A performed better, right?

SHARPE RATIO

- Though Student A could have a better average than B, his volatility is seems higher
- His scores range from 100 to 45. Upon calculating, his volatility comes to 19.74*.
- Student B on the other hand did not deliver spectacularly in any particular subject, but he performed steadily. Upon calculating, his volatility comes to 8*.

*Calculation for volatility is not part of this lesson.

SHARPE RATIO

Hence the Sharpe Ratio of A would be: 70/19.74 = 3.54

And the Sharpe Ratio of B would be: 69/0.4 = 8.62

Thus, despite a higher average, A's Sharpe ratio is lower than that of B.

This indicates that simply looking at performance from average marks point of view is not enough to judge performance.

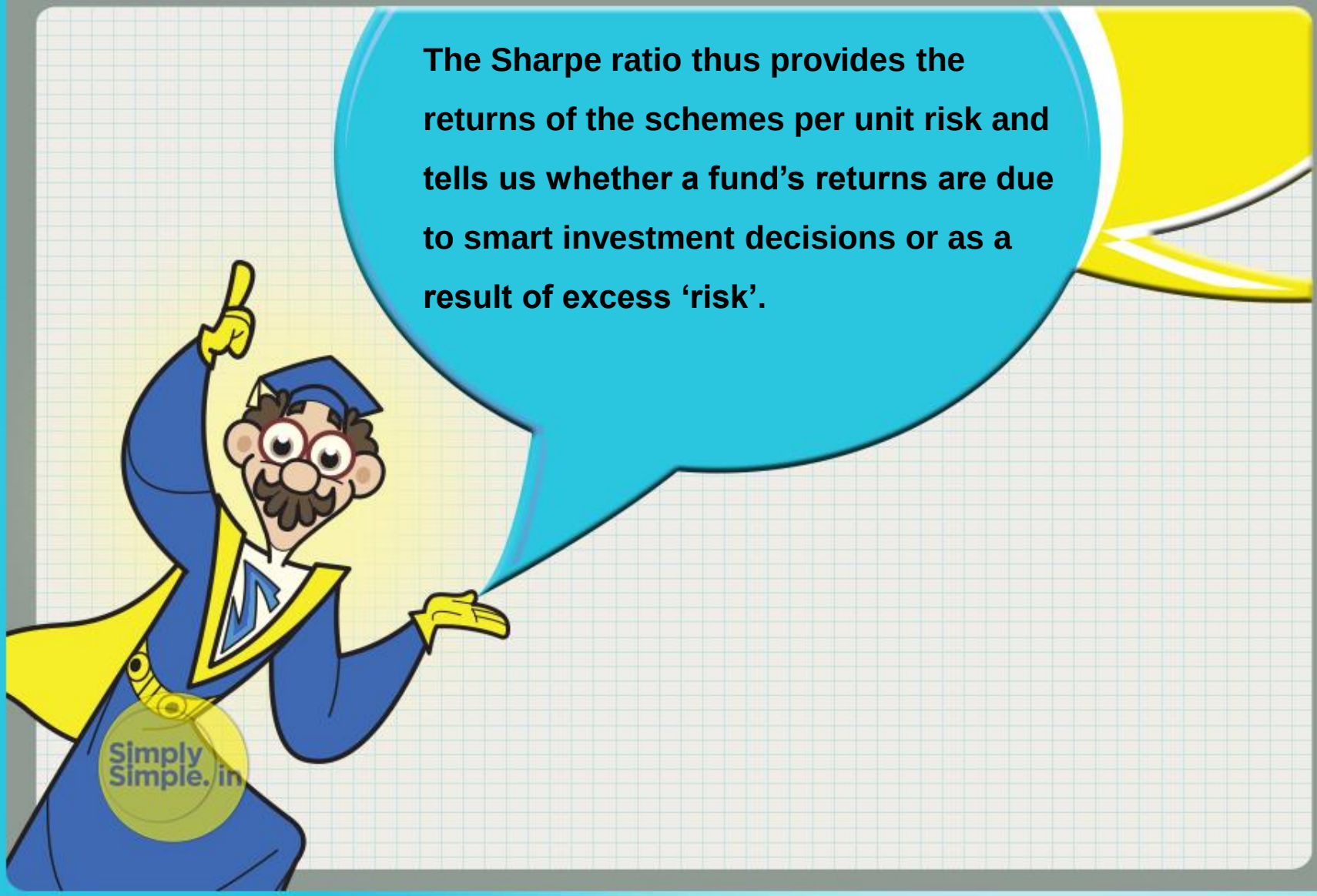
SHARPE RATIO

This is what Sharpe Ratio does .

In a sense it measures performance by making their volatilities equal across schemes.

In a sense Sharpe ratio helps to compare apples to apples instead of apples to oranges.

SHARPE RATIO



SHARPE RATIO

Hope this lesson has succeeded in further clarifying the concept of ‘Sharpe Ratio’.

Thinking of Investment

Contact

vEcoSys

Simply Simple.in

DISCLAIMER

The views expressed in this lesson are for information purposes only and do not construe to be any investment, legal or taxation advice. The lesson is a conceptual representation and may not include several nuances that are associated and vital. The purpose of this lesson is to clarify the basics of the concept so that readers at large can relate and thereby take more interest in the product / concept. In a nutshell, Professor Simply Simple lessons should be seen from the perspective of it being a primer on financial concepts. The contents are topical in nature and held true at the time of creation of the lesson. This is not indicative of future market trends, nor is vEcoSys IMF Pvt. Ltd. attempting to predict the same. Reprinting any part of this material will be at your own risk. vEcoSys IMF Pvt. Ltd. will not be liable for the consequences of such action.

Mutual Fund investments are subject to market risks,

read all scheme related documents carefully.