

How to select an equity mutual fund -preamble

Over the next few days, I would like to do a series on "How to select an equity mutual fund". This is the long overdue update to the **step by step guide** to mutual fund selection.

I write this primarily because my understanding about mutual funds has grown significantly since I wrote the pdf guide. I have already shared this with you in the form of analysis and calculators. Would like to consolidate it in terms of specific steps.

In this post, I would like to start with a preamble which will define the objectives and the framework of what will follow.

The **central objective** is quite simple: To enable anyone to select a mutual fund in about 20-30 minutes. This time will reduce significantly once the investor gets a better grip on the method.

There are however a few necessary prerequisites to make the selection process easier.

The following and ensuing posts are valid only for long-term goals that is 10 years or more away.

- 1) A financial goal is mandatory. Questions like, "why am I investing?" and "when do I need the money?" should be answered.
- 2) What is the proposed asset allocation? For a given goal and duration, how much will the exposure in the equity fund that you would like to select be? This is crucial because many people make the mistake of investing in 100% equity for long-term goals. The equity:debt (fixed income) allocation is mandatory.
- 3) What is the expected return from the equity mutual fund for the investment duration? Personally I will use 10% for calculating the investment amount and expect about 12%. Do not expect more than 15%.
- 4) Expected return from total portfolio = (expected return from equity) x (equity allocation) + (expected post-tax return from debt) x(debt allocation)
- 5) Use the expected portfolio return in a standard goal planner with about 10% inflation for all goals expected retirement. For retirement use a minimum of 8% inflation. With other inputs found in the goal planner, you should be able to determine the necessary monthly investment. Even if you are not able to invest as much, this step is necessary to understand the requirements of the financial objective.
- 6) Decide about the debt portfolio. For goals which are 15 financial years away, PPF is a good choice. EPF or mandatory NPS will do fine for retirement. For other goals, you can consider short-term debt mutual funds.
- 7) Decide about the equity portfolio. There are many ways to do this. I prefer minimalist portfolios

I prefer 60% in large cap and 40% in mid and small caps. So one large cap fund and one mid and small cap fund is all that you need. You can also opt for a single large and mid-cap fund.

A single equity-oriented balanced fund will also work fine. In which case you need to take care of overall equity:debt asset allocation.

Once you have decided how you are going to construct your portfolio and what mutual fund *categories* you are going to choose, you are all set to pick a fund to invest in.

Those who have already started investing but have not performed any of the above steps, can do so now. Better late than never.

There are many ways to select a mutual fund. I would like to present three ways to do it. I do not qualitatively

analyze a fund too much. If the fund is good, I believe it should show up in the NAV movement. So for the most part I treat a fund as a black box. However, I ensure that is label on the box is the one I want.

Here are the methods to be discussed. Regular readers will understand where I am going with this.

Method 1: This is identical to **mutual fund guide** published earlier. Short-list funds based on consistent performance and then consider risk-return metrics for last 3 years.

Method 2: Short-list funds based on consistent performance and then consider risk-return metrics for longer durations either based on investment duration or for each year.

Method 3: Short-list funds based on consistent performance and then consider downside protection and or consistent long-term rolling returns.



How to select an equity mutual fund - Creating a shortlist

Any selection process should have three components: (a) an objective; (b) a method to create a shortlist and (c) a method to finalize with the shortlist.

Yesterday we discussed the objective. Today we shall consider how to create a shortlist from which an equity mutual fund can be selected.

If you have not read yesterday's post, I strongly urge you to do so before reading this any further:

How to select an equity mutual fund -preamble

Creating a shortlist

Note: The description of the shortlist may appear long. In practice, you should be able to create one in under 150 minutes on your first attempt and in under 10 minutes later. So please hang on.

Creating a shortlist is as important as it is difficult. The criterion used to create one is arbitrarily chosen and is based on personal comfort. It can neither be too broad (meaning too many funds to analyze deeper), nor too narrow (if only a few funds satisfy us, then they are likely to fall out of favor soon). F0r example, the rating of a five-star fund can only go down!

We need to cast a reasonably broad net to create the shortlist. Peer comparison is a necessary evil to create the shortlist. I prefer to abandon all peer comparison once the shortlist is prepared.

The primary reason for that is simple: before selecting a fund, we are analysts. After selection, we are investors. Analyst and investors will have very different numbers (returns/risk metrics) to stare at when the asset class is volatile.

Once I invest, I take decisions based on the health of my portfolio tagged to a specific goal. Many make the mistake of worrying about peer comparison, view their holdings like analysts instead of viewing it as investors.

I will discuss two methods of creating this shortlist: with value research online and with Morning Star. It is easy to extend this method to other portals.

Shortlisting with Value Research Online

This is the method discussed in the previous version: Step-by-Step Guide to Selecting a Mutual Fund

Since the time it was written, VR online made a crucial change: It removed the "last seven years trailing return" entry from the category listing.

Trailing return simply refers to the CAGR for the last 1/3/5/7/10 (etc.) years at any given point in time. If I am not wrong, VR updates this each month.

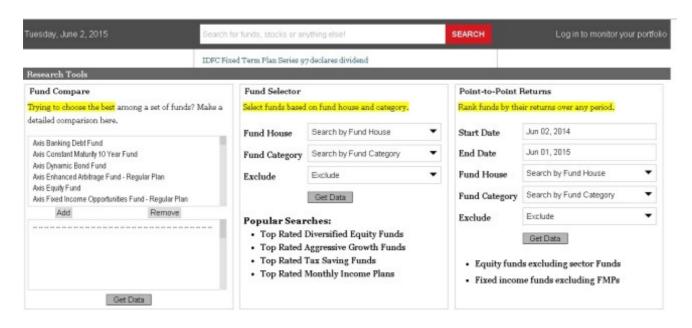
Removal of the 7Y return has made the shortlist a bit longer.

Let us know go through this process, step by step. Click on the images to enlarge them if you wish.

1) Go to https://www.valueresearchonline.com/

Skip the annoying ad, go to the main page and scroll down until you see 'research tools'.

We will be working with the 'Fund selector'



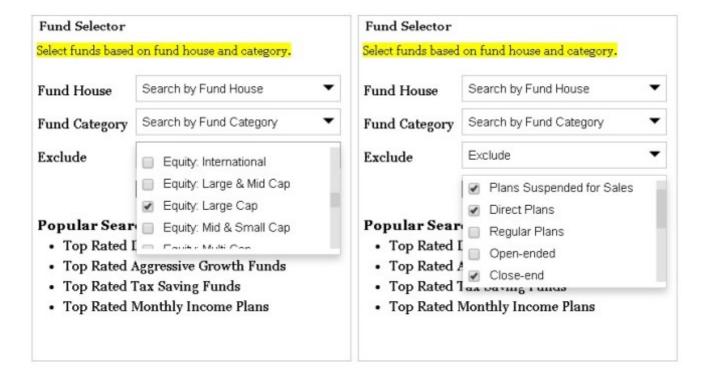
2) Leave the fund house entry alone.

In the fund category entry (left image bel0w), uncheck whatever is checked and check "Equity: large cap" (we assume that is the category we are looking to invest in. The process for other equity categories is the same).

In the exclude entry (right image below),

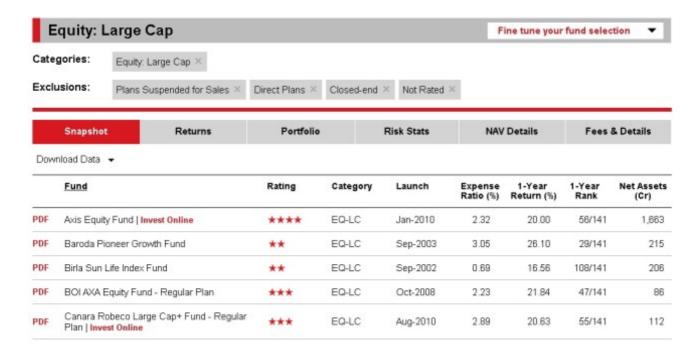
- a) check plans suspended for sales
- b) check direct plans (adding them will only clutter the process. The folios and relative performance for regular and direct funds is the same).
- c) check closed-ended

Scroll down and uncheck 3 star, 2 star, 1 star and unrated (optional).



When ready, click "Get Data".

3) You will be taken to this sheet. Click on returns.



4) You will then be taken here.



We will now discuss two methods of shortlisting consistent performers.

A) Anchor the search with 5-year returns. Click on 5-years returns (red box above) once or twice until the fund are arranged in ascending order. Then you need to decide the cut-off rank. Suppose we select funds which were ranked in the top 25 over last 3 years, 5 years and 10 years, we will get something like this (partial list).

Fund Rating	1-N	lonth	3-N	lonth	1-1	ear/	3-Year		5-Year		10-Year	
10 1070	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
UTI Equity Fund ****	3.56	18/145	-1.16	10/144	29.65	16/141	26.40	1/75	16.79	2/62	17.77	7/34
ICICI Prudential Focused Bluechip Equity Fund - Regular Plan ★★★★★	2.48	111/145	-3.52	63/144	23.19	42/141	24.89	8/75	16.29	3/62	-	-
UTI Opportunities Fund ****	2.18	126/145	-3.93	72/144	23.37	39/141	22.55	26/75	16.06	4/62	-	-
ICICI Prudential Top 100 Fund - Regular Plan I ★★★★	2.09	130/145	-4.63	120/144	18.56	67/141	23.19	21/75	15.11	5/62	17.95	6/34
UTI Top 100 Fund ★★★★	2.92	90/145	-1.95	21/144	30.93	10/141	24.41	10/75	14.50	6/62	- 5	-
JP Morgan India Equity Fund ★★★★	3.07	56/145	-2.85	42/144	26.99	27/141	24.25	11/75	14.26	7/62		
L&T India Large Cap Fund ★★★★	4.18	9/145	-3.14	47/144	26.94	28/141	24.24	13/75	14.15	8/62		-
UTI Mastershare Fund ***	2.59	108/145	-2.76	40/144	29.62	17/141	24.12	14/75	14.12	9/62	16.02	15/34
Franklin India Bluechip Fund ***	4.55	5/145	0.40	5/144	27.67	24/141	22.70	25/75	14.11	10/62	18.78	4/34
SBI Magnum Equity Fund ***	2.54	110/145	-2.88	43/144	27.65	25/141	23.29	20/75	13.95	11/62	18.92	3/34
ICICI Prudential Select Large Cap Fund - Regular Plan ★★★★	2.37	118/145	-4.08	76/144	21.69	49/141	23.70	17/75	13.94	12/62	2	
L&T Indo Asia Fund ★★★★	1.99	134/145	0.21	7/144	25.17	33/141	22.36	27/75	13.81	13/62		-

Invariably we have shortlisted many (not all) 5-star or 4-star funds which are less than 10 years old. If you are fine with this, then you can proceed.

By removing the 7-year entry, VR forces us to rely on its star rating more. Who are they to tell us (at least me) that it is enough to review only 5-year and 3-year histories?

I prefer a fund which has consistently been in the top 25 for 3, 5 and 10-year periods. So I would like to click on the 10-year returns until they are arranged in ascending order and then create the short list.

Top 25 might sound too broad. Narrower the net, higher the expectation and sooner the fund is likely to disappoint.

As far as I am concerned, I will not repeat this exercise unless the selected fund is a laggard in my folio *after* giving it at least 3 years to perform. Laggards are not identified by peer comparison (drop in star rating etc.) but with respect to net XIRR of the equity portfolio. See more here: **How to review a mutual fund portfolio**

B) Anchor the search with 10-year returns. Click on 10-years returns once or twice until the fund are arranged in ascending order. Then you need to decide the cut-off rank. Suppose we select funds which were ranked in the top 25 over last 3 years, 5 years and 10 years, we will get something like this (partial list). Funds marked in red have done well in the past but not in the recent future *relatively*.

Fund Rating	1-1/	fonth	3-8	donth	1	-Year	3-Y	ear	5-Year		10-Year	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
HDFC Top 200 Fund ***	2.39	116/145	-3.48	61/144	17.05	102/141	23.09	22/75	13.48	16/62	20.06	1/34
DSP BlackRock Top 100 Equity Fund - Regular Plan ***	2.14	128/145	-6.29	140/144	17.35	94/141	19.90	64/75	12.08	31/62	19.04	2/34
SBI Magnum Equity Fund ****	2.54	110/145	-2.88	43/144	27.65	25/141	23.29	20/75	13.95	11/62	18.92	3/34
Franklin India Bluechip Fund ***	4.55	5/145	0.40	5/144	27.67	24/141	22.70	25/75	14.11	10/62	18.78	4/34
Kotak 50 Regular Plan ***	3.28	25/145	-2.66	38/144	30.72	11/141	24.54	9/75	13.44	17/62	18.08	5/34
ICICI Prudential Top 100 Fund - Regular Plan ***	2.09	130/145	-4.63	120/144	18.56	67/141	23.19	21/75	15.11	5/62	17.95	6/34
UTI Equity Fund ****	3.56	18/145	-1.16	10/144	29.65	16/141	26.40	1/75	16.79	2/62	17.77	7/34
Tata Pure Equity Fund - Plan A ***	3.49	22/145	-3.45	58/144	24.13	37/141	22.79	24/75	13.10	18/62	17.62	8/34
HDFC Index Fund - Sensex Plus Plan ★★★	3.00	79/145	-3.53	64/144	17.51	89/141	21.09	40/75	12.61	21/62	17.25	9/34
DWS Alpha Equity Fund ***	3.10	50/145	-2.51	34/144	28.80	19/141	25.78	4/75	12.27	25/62	17.08	10/34
ICICI Prudential SPIcE Fund	3.15	38/145	-4.36	86/144	16.08	119/141	21.32	35/75	12.51	23/62	16.29	11/34
Sundaram Select Focus Fund - Regular Plan *	1.76	137/145	-5.39	141/144	14.66	133/141	19.79	67/75	9.42	60/62	16.27	12/34
ICICI Prudential Index Fund - Regular Plan ★★★	3.01	77/145	-4.51	105/144	17.24	97/141	20.91	43/75	11.85	33/62	16.26	13/34
Baroda Pioneer Growth Fund **	3.07	57/145	-2.48	32/144	26.10	29/141	23.97	16/75	10.91	48/62	16.21	14/34
UTI Mastershare Fund ****	2.59	108/145	-2.76	40/144	29.62	17/141	24.12	14/75	14.12	9/62	16.02	15/34

We now have more 10-year old funds and the dependence on star rating is lower. The shortlist also is a bit smaller.

I am more comfortable with this. Now that we have a shortlist, we are ready to analyze further. Before that AMC bias may shorten the list further (we are humans, not machines).

I may prefer a Franklin, HDFC or ICCI over Kotak, Tata or DWS. I may already have an account in one of the amcs!

Had we shortlisted only 4 and 5-star funds, we will end up with 19 funds. This way (with 5-year or 10-year anchoring) we only have 9-10 to choose from.

We will take up further analysis in the next post on this series. I would now like to discuss a faster way to shortlist with Morning Star.

Shortlisting with Morning Star Screener

Morning Star India has a nice screener which can automate the above shortlisting and reduce it down to minutes.

However, it has only large cap and mid/small cap categories. Unlike Value Research which distinguishes among large cap, large and mid-cap, mid and small-cap and multi-cap.

This can present a considerable problem unless we look at the folio carefully. When I tried out a large cap short-list I end up with many large and mid-cap funds. If you can handle this, this is a smart way to create a shortlist.

1) Go to

http://www.morningstar.in/tools/mutual-fund-screener.aspx

First make the following choices. The *total results* will vary according to the choices. If it is zero, it means you will have to change the choices.

Fund Type	Total Results: 236
Fund Universe	What is the Fund Type section about?
India Open End Funds	Select the best funds for your research using this section of the Fund Screener.
und Company	Start by using Morningstar® Categories, our style-based peer groups. Build your top funds list using just open-end funds and/or offshore funds.
All Companies	your top runus list using just open-end runus and/or offshore runus.
33,17,111	Base currency is helpful for finding funds priced in sterling or the currency of your preference.
forningstar® Category	
Large-Cap	 If you're looking for income funds, select Inc under Distribution Status; for funds that reinvest their distributions, select Acc for Accumulation.
Distribution Status	Read more in our <u>glossery</u>

Inc stands for dividend option and Acc stands for growth.

Scroll down to further make the following choices

Fund Perf	orman	ce & Risk			
Morningst *** *** *** **	** *	ng™	0 0	ingstar Analyst Rating™ 3 Gold 3 Silver 3 Bronze Neutrol Negotive	What is the Fund Performance and Risk section about? The Morningstar Rating™ is based on a fund's performance against its Morningstar® Category, adjusting for risk and sales charges. The top 10% of each Morningstar® Category receive five stars, the next 22.5% four stars, the middle 35% three stars, the next 22.5% two stars, and the bottom 10% one star. Morningstar Risk helps you evaluate variations in a fund's monthly returns in comparison to its Morningstar® Category, The greater the variation, the larger the risk score. You can also use standard deviation to screen by fund
Morningst	ar Risk	(Rel to Ca	t) Ava	+ Avg High	volatility. Use the return screens to find funds that have outperformed their category
3 Yr Stand	lard De	viation			average or a specific return threshold. Read more in our glossary
	Low		Moderate	High	
Return %		110000			
YTD	>	Please se	elect 🔻		
1 Year	>	Please se	elect 🔻		
3 Year	>	Category	Average *		
5 Year	>	Category	Average *		
10 Year	>	Please se	Average *		

First choose 3-year, 5-year and 10-year returns above the category average.

As you set the option for each year, have an eye on the *total results* at the top. It should not become zero. If it does, you will have to change or relax your options.

With the above choices, 15 funds to choose from.

Play around with the morning star risk rating (low, below average, average, above average, high) and

3-year standard deviation to see if you can reduce the shortlist.

Low -> 0 results

• Avg (below average) -> 3 results

Avg -> 6 results

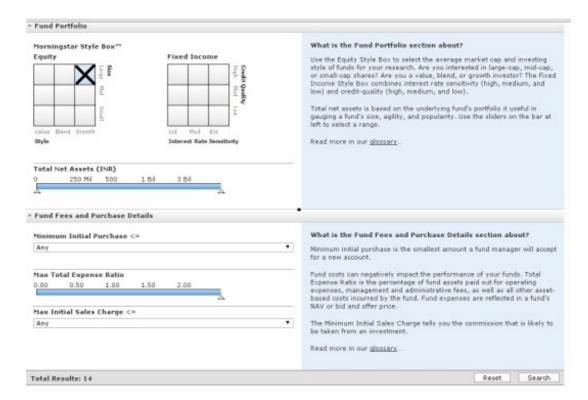
-Avg and Avg –9 results (I like this)

You can choose what you like.

Further modifications can be done with the so-called Morning Star Syle Box.

For large cap funds choose:

Large and Growth (stocks with substantial earning, high PE, high PB)



A good 14 out of the 15 shortlisted funds belong to this category. One to large and a blend of value (underpriced stocks with low PE and low PB) and growth.

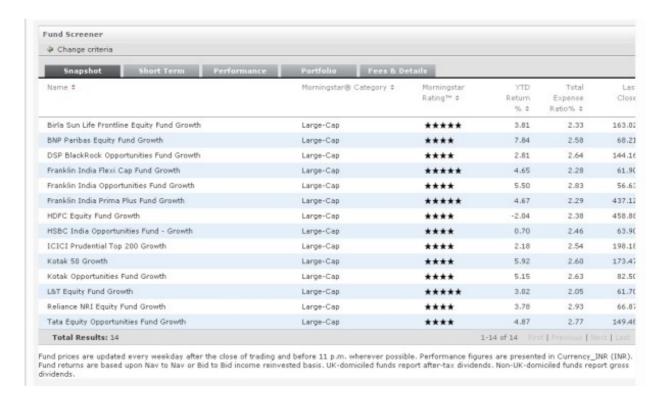
If you don't understand this, you can ignore the style box for a start or read more about the difference between growth and value stocks or about the morning star style box.

Don't worry about AUM of a large cap fund. For a mid and small cap fund, it is not a terrible idea to choose the fund with smallest AUM after further analysis.

Mid and small cap funds with large AUM (say more than 5000 Crores) tend to have more large cap stocks for liquidity.

Reducing the expense ratio even by one step makes the total results count go to zero!

Finally, hit search to get this shortlist.



Do not jump to conclusions that the shortlist has only 4/5-star funds and that could have been the lone criterion.

If you tried that you will have 43 funds to contend with instead of just 14.

Out of this 14, you will need to weed out the large and mid-cap funds in consultation with Value Research *if you* are not looking for one!

We are now ready to analyze further. This is equally simple. I will take that up in a different post.

Was this not easy? Anybody with a little common sense can do this.

DIY and go direct. Do not trust anyone who says that mutual fund selection is hard. They say so because they have a business to run.

DIY implies doing everything yourself. Not making a shortlisting and asking others. If you don't have confidence (time is not the issue), get yourself a fee-only financial planner who will suggest direct mutual fund plans.



How to select an equity mutual fund – Making a Choice!

In this third and final part on "how to select an equity mutual fund", we will consider different ways in which one 'make a choice' from a shortlist.

Yes, there are several ways to choose from a shortlist, just like there are several ways to make a shortlist. You will have to take your pick. It is easy to do so. All you need to do is to try and sell your pick to your rational side. That is you must be able to justify your method to yourself. Forget about what others think.

Before we proceed, a suggestion to read the first two stages in the selection process, if you have not done so:

(1) The objective or the preamble for fund selection

(2) How to create a shortlist

Note: The title of this post is 'making a choice' and not finding the best fund from the shortlist. This means that no matter how hard you try to shorten your shortlist, you will not be able to do so (if you objectively go about it).

So from a 10-15 fund shortlist, you will end with maybe a 2-5 fund shortlist. You will have to pick one from this. There is no other way of doing this.

This is a long post. A total of 7 methods are listed. Not all methods are (or can be) discussed in detail. Please consult the links provided for more information.

Method 1: Just pick one from the shortlist!

Method 2: Using short-term risk-return metrics

Method 3: Using long-term risk-return metrics

A. With Morningstar India

B. With the freefincal risk-return analyzer

Method 4: Using downside capture ratios

A. With Morningstar India

B. With the freefincal risk-return analyzer

Method 5: With rolling returns

Method 6: With information ratio

Method 7: With Ulcer index

I urge you read/consider all the methods, and develop your own. A combination of methods can also be considered

Method 1: Just pick one from the shortlist!

By the time you are finished with this post, chances are that you might agree that doing an "*Eeny*, *meeny*, *miny*, *moe*" from the shortlist is a pretty good method. Why not?

Think about it, you have made a shortlist based on consistent performers based on 3, 5 and 10-year returns. So why not pick one from this list? The risk associated with the returns obtained will be neglected, but this method is any day better than what many people do: ask for best fund names or ask other people to pick from their shortlist.

If the following appears a bit complicated to you, adopt method 1, but do not fail to learn "how to review your mutual fund portfolio".

If so, why can't I use star ratings as a guide? From my experience, people who start using star ratings do not know when to stop. They would compare peers without checking the *actual* performance of their portfolio. I can never fee comfortable with such a strategy. Personal finance is an individual race.

Not convinced? Ty this: The Trouble With Mutual Fund Star Ratings

Eeny, meeny, miny, moe, Pick a fund by its show. If it falters, let it go, Eeny, meeny, miny, moe.

Method 2: Using short-term risk-return metrics

This is the method outlined in the step-by-step fund selection guide

There are two issues that I did not realize/know when I wrote the above.

A. The risk-return metrics listed at Value research are over only 3 or 5 years only. They have not bothered to state this, nor replied to my question reg. this. My guess after hours of staring at their listing pages is that the metrics are over the last 3 years.

B. See below (perhaps not immediately!)

When we make a shortlist considering 3, 5 and 10-year returns, should we only consider 3 years risk-return metrics?

Perhaps not. It is not a terrible choice, but I think we can do better.

For the record, let us get through with it. It is anyway a good starting point for getting comfortable about these metrics. To be frank, I am delighted that many readers have done exactly that.

Let us look at some definitions first:

Alpha It is a measure how much it has outperformed its benchmark index. Higher (positive!) the alpha the better. Beta Measure of volatility. Beta of 1.3 means fund is 30% more volatile than the market as a whole. So low beta is important for

Beta Measure of volatility. Beta of 1.3 means fund is 30% more volatile than the market as a whole. So low beta is important for risk-averse investors

Standard Deviation: Higher the std. dev. higher the fluctuations in returns.

Sharpe Ratio: Measure of return wrt to risk. A good fund gets returns without too much risk and will have higher Sharpe ratio A risk-averse investor will look for reasonable returns and with low fluctuations in return. So they will look for reasonably high alpha, low beta, low R-squared, low std.

Sortino ratio: The Sharpe ratio considers both positive and negative excess returns (wrt risk-free rate). The Sortino ratio considers only the negative excess returns while calculating the standard deviation. Higher the better.

If you are looking for an easy-to-understand visual aid for understanding these metrics, try this: **Visualizing Mutua Fund Volatility Measures**

What now?

Look for funds with reasonably high alpha, low beta, low std- dev, high Sharpe ratio and high Sortino ratio.

Hang on.

Higher the beta, higher the standard deviation (typically!)

Higher the alpha, higher the Sharpe ratio (typically!!)

Higher the Sharpe ratio, higher the Sortino ratio (typically!!!)

So all we need to do is to look for fund wth reasonably

high alpha, and low beta

I would prefer to state this the other way:

- 1) Look for low beta
- 2) choose funds with highest alpha among the low-beta group.

Pick one of those funds. You done.

I have removed a measure called R-squared (tells you how closely performance is related to the index. Higher the value closer will the performance. All large cap funds will have high R-square). I feel that this is too useful.

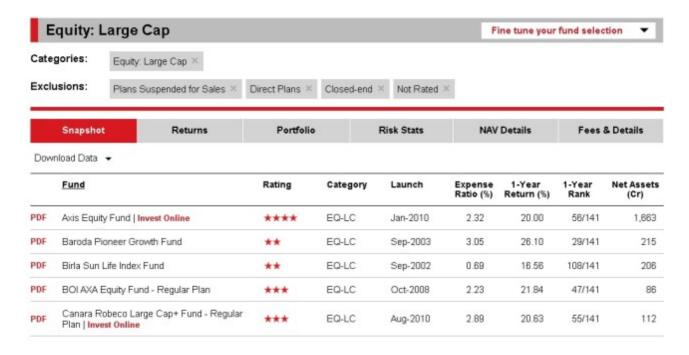
So let us now return to the shortlist.

Fund Rating	1-Month		3-Month		1-Year		3-Year		5-Year		10-Year	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
HDFC Top 200 Fund ***	2.39	116/145	-3.48	61/144	17.05	102/141	23.09	22/75	13.48	16/62	20.06	1/34
DSP BlackRock Top 100 Equity Fund - Regular Plan ***	2.14	128/145	-5.29	140/144	17.35	94/141	19.90	64/75	12.08	31/62	19.04	2/34
SBI Magnum Equity Fund ****	2.54	110/145	-2.88	43/144	27.65	25/141	23.29	20/75	13.95	11/62	18.92	3/34
Franklin India Bluechip Fund ***	4.55	5/145	0.40	5/144	27.67	24/141	22.70	25/75	14.11	10/62	18.78	4/34
Kotak 50 Regular Plan ***	3.28	25/145	-2.66	38/144	30.72	11/141	24.54	9/75	13.44	17/62	18.08	5/34
ICICI Prudential Top 100 Fund - Regular Plan ★★★★	2.09	130/145	-4.63	120/144	18.56	67/141	23.19	21/75	15.11	5/82	17.95	6/34
UTI Equity Fund ****	3.56	18/145	-1.16	10/144	29.65	16/141	26.40	1/75	16.79	2/62	17.77	7/34
Tata Pure Equity Fund - Plan A ***	3.49	22/145	-3.45	58/144	24.13	37/141	22.79	24/75	13.10	18/62	17.62	8/34
HDFC Index Fund - Sensex Plus Plan ★★★	3.00	79/145	-3.53	64/144	17.51	89/141	21.09	40/75	12.61	21/62	17.25	9/34
DWS Alpha Equity Fund ***	3.10	50/145	-2.51	34/144	28.80	19/141	25.78	4/75	12.27	25/62	17.08	10/34
ICICI Prudential SPIcE Fund	3.15	38/145	-4.36	86/144	16.08	119/141	21.32	35/75	12.51	23/62	16.29	11/34
Sundaram Select Focus Fund - Regular Plan ★	1.76	137/145	-5.39	141/144	14.66	133/141	19.79	67/75	9.42	60/62	16.27	12/34
ICICI Prudential Index Fund - Regular Plan ★★★	3.01	77/145	-4.51	105/144	17.24	97/141	20.91	43/75	11.85	33/62	16.26	13/34
Baroda Pioneer Growth Fund **	3.07	57/145	-2.48	32/144	26.10	29/141	23.97	16/75	10.91	48/62	16.21	14/34
UTI Mastershare Fund ***	2.59	108/145	-2.76	40/144	29.62	17/141	24.12	14/75	14.12	9/62	16.02	15/34

Recall the procedure for getting the above return screen at Value Research. You will find the steps here

No need to do that right now. Follow this link in another browser tab to get this screen.

https://www.valueresearchonline.com/funds/fundSelector/default.asp?cat=8&exc=susp%2Cdir%2Cclose%2CnotRated



You have already made the shortlist (funds corresponding to blue rectangles)

Now click on Risk-stats

You would need to prepare this kind of table. You can do so manually. Over the years, many readers have sent me their excel files in which they have made this process simpler.

You can download the excel file from VR and extract data for the funds in your shortlist.

	A	В	С		E	F	G	
1	Value Research Online							
2	Date: 06-Jun-2015 21:44				7			
3	Fund	Standard Deviation 🕞	Sharpe Ratio 🖃	Sortino Ratio 🕞	Beta 🔝	Alpha 🐷	R-Square	
4	Tata Pure Equity Fund - Plan A	11.83	1.19	2.02	0.81	4.16	0.92	
5	ICICI Prudential Top 100 Fund - Regular Plan	13.64	1.09	2.01	0.92	3.59	0.89	
6	UTI Equity Fund	13.72	1.27	2.39	0.93	6.02	0.91	
7	SBI Magnum Equity Fund	13.65	1.09	2.2	0.94	3.36	0.93	
8	DWS Alpha Equity Fund	13.56	1.24	2.25	0.95	5.25	0.95	
9	Franklin India Bluechip Fund	13.91	1.03	2.22	0.96	2.63	0.93	
10	Kotak 50 Regular Plan	15.02	1.07	2.05	1.03	3.43	0.93	
11	HDFC Top 200 Fund	17.87	0.85	1.93	1.2	0.47	0.88	

If you know a bit of excel, you can select the tabulated shortlist, go to data and click on filiter. That will produce the encircled sorting menu as shown above. If you don't know how to do this or use Excel, do it with pen and paper. No big deal!

You can then sort the beta column from smallest to largest. What has been described above will take only 10 mins.

Now notice the yellow selection. Low beta with reasonably high alpha.

We have our winners! Pick one fund you are comfortable with. Done!

Wait a minute! What about Franklin Blue Chip and HDFC Top 200! Why did they not make the cut?

Simply because they have not done well in the last three years and we are only looking at last three-year metrics!

Method 3: Using long-term risk-return metrics

What if you wanted to consider risk-return metrics over longer durations? After all, we considered long-term returns to make the short-list.

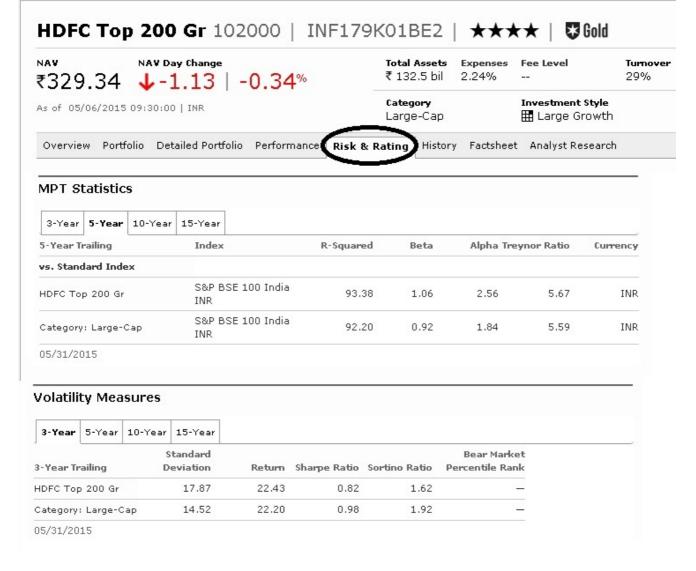
Makes sense. There are two ways to accomplish.

A. With Morningstar India

There are two issues here. (1) there is no risk-return listing for all funds like VRonline and (2) all ratios are calculated with BSE 100. Not a bid

- (1) there is no risk-return listing for all funds like VRonline. So you need to go to each fund page.
- (2) all ratios are calculated with BSE 100. Perhaps not a problem for pure large cap funds. Will not use for other categories.

See here for a sample. This is not a screenshot. I have only included stuff that I need!



Notice that the metrics are available for different durations.

Trouble is, the funds benchmark is BSE 200 and not BSE 100.

You can consider the metrics pretty much as mentioned before, make a table for different durations or visually observe for consistency and make a choice. It will not take as long as it seems. Hey, whose money is it anyway!

This has a got a new metric:

Treynor Ratio is known as the reward to volatility ratio. While the Sharpe ratio is the excess return (wrt risk free rate) divided by standard deviation, Treynor ratio is the excess return divided by beta. This is calculated for both the fund and the benchmark for which beta is assumed to be 1.

Higher the Treynor ratio, better is the performance (higher returns + low volatility wrt benchmark)

B. With the freefincal risk-return analyzer

If you do not like the fact that morningstar uses the same benchmark for all funds, you can consider my **risk-returr** analyzer

You can then choose from Nifty, CNX 100, CNX Mid Cap, CNX 500, Sensex, BSE Small Cap, Mid Cap, BSE 100,200, 50.

Consider 1 to 9-year durations. Calculate lump sum and SIP returns for each duration

Evaluate the risk-return score with 13 metrics.

You can also consider the Year on Year Mutual Fund Risk Return Analyzer for reviewing yearly performance.

Method 4: Using downside capture ratios

This is the method I advocate in the investor workshops.

The main advantage of this model is that it does not depend on modern portfolio theory (MPT) ratios which are applicable only for normal or Gaussian distributions. It is quite possible (in fact easy to pve)that they may not work with mutual funds and stocks! This means all star ratings are on shaky ground!!

People use MPT metrics because alternatives are tough to evaluate (more on this soon).

Upside capture.

For a given period, how much of the benchmarks gains has the fund captured? Higher the better.

Downside capture.

For a given period, how much of the benchmarks losses has the fund captured? Lower the better.

From what I have seen, consistent downside protection is the source of alpha.

I have written about this in detai learlier:

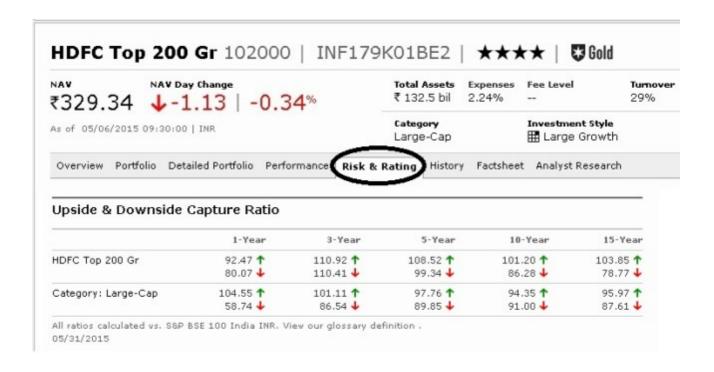
Understanding Upside and Downside Capture ratios

Simplify Mutual Fund Analysis with Upside/Downside Capture Ratios

Again two methods

A. With Morningstar India

Morningstar again uses only BSE 100 for calculation. However, this is easy to use and is perfect for large cap funds and maybe a bit too stict for mid and small-cap funds.



B. With the freefincal risk-return analyzer

Again trouble with morningstar is it uses the same benchmark for all funds. You can use my **risk-return analyzer** which has a separate upside downside page. The evaluation strategy is different from what morning star uses but the essence is the same.

I will post an exclusive tool to calculate this better. See some screenshots of this are available here

Method 5: With freefincal rolling returns calculator

RoOlling returns offer a smart and easy to understand way to evaluate consistency in performance.

Suppose you want to evaluate fund performance from Jan 1st 2000 onwards.

You calculate 3-year CAGR* from 1s Jan 200 to Dec. 31st 2002. Then you shift the period by a day (roll over) and calculate 3-year CAGR* from 2ns Jan 200 to 1st Jan. 2003 and so on. Plot them together and stare at it.

· for both fund and its benchmark

This idea is to look for consistent long-term outperformance.

See this post for more details:

Mutual Fund Rolling Returns Analysis: Franklin India Blue Chip Fund

and use this automated sheet for calculations:

Mutual Fund Rolling Returns Calculator

Method 6: With information ratio

Information is defined as the average excess return of the fund wrt benchmark for a given period, divided by the standard deviation of the excess return.

Consistently high information ratio is a good indicator of performance. Dr. Uma Shashikant says,

"Information ratio is my key quantitative indicator".

See this post for more details (calculator in the same post):

Mutual Fund Analysis with the Information Ratio

Method 7: With Ulcer index

Ulcer index is another downside protection indicator. It penalizes funds more for lapses in downside protection than other metrics. This is my personal favourite (thanks To Ramesh Mangal)

See this post for more details:

Mutual Fund Analysis With the Ulcer Index

and use this for calculations:

risk-return analyzer which has a separate ulcer index page.

Was I not right? Doesn't "Eeny, meeny, miny, moe" from the shortlist seem like a pretty good method now!!

Would you like a suggestion?

For large-cap funds:

Use: Method 4 A: Using downside capture ratios with morning star data

For mid and small-cap funds

Use: Method 4 B: Using the new downside capture ratio calculator (releasing in a couple of days)

Alternatively

Use: Method 7: With Ulcer index

or a combination of

Method 5: With freefincal rolling returns calculator and

Method 7: With Ulcer index