

Manager Selection For Alternative Investments

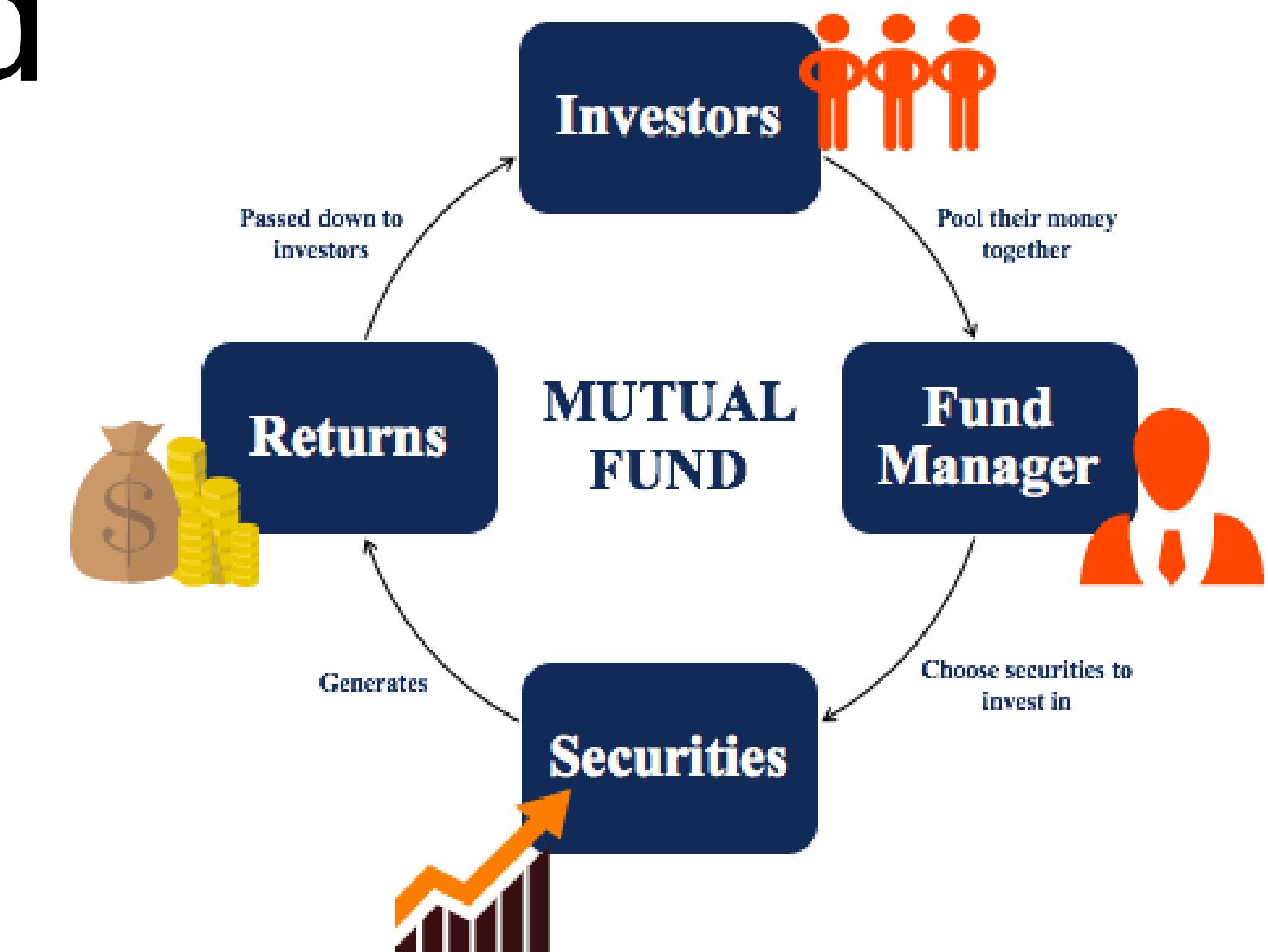
Quant Case
Study

Khushi Singhvi
Indian Institute of Technology
Guwahati

Mutual Fund

it is a financial vehicle that collects a pool of money from investors to invest in securities as per its investment mandate.

The risk profile of the fund should be understood before investing.





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Quantitative framework to select a mutual fund from an universe:



Step 1:

Divide the available mutual funds into different categories. The categories that we consider are:

1 LARGE CAP FUNDS

2 MULTI CAP FUNDS

3 SMALL CAP FUNDS

4 MID CAP FUNDS

5 LARGE & MID CAP FUNDS

6 FOCUSED FUNDS

NOW WE COMPARE THE FUNDS THAT ARE IN THE SAME CATEGORY



Rolling percentile rank

- 01 Rank the funds based on returns delivered during every three year period starting from a picked start date.
- 02 The percentile rank is used to rank the fund based on the returns delivered during that three period.
- 03 This method solves various problems:
 - funds launched in different time periods.
 - the varied number of funds in the universe in each three year period.

Step 2:

After categorizing, rank the funds using the percentile ranks for different cases as follows:

LONG-TERM PERFORMANCE WITH RESPECT TO PEERS

Calculate the average of all rolling percentile ranks over all periods of each fund.

High average percentile rank -> More spread out data -> High volatility -> High risk

CONSISTENCY OF PERFORMANCE

Calculate the percentage of times the fund has been in the top 25% also known as the Top25 percentage.

Less Top25 percentage -> Less Consistent -> Higher Risk.

OVERALL RISK ASSOCIATED WITH THE FUND

Calculate the modified version of standard deviation known as Downside Deviation. It is calculated by calculation standard derivation ignoring all positive deviations. Cutoff date is considered because of time sensitivity.

High standard deviation -> High Risk

RECENT PERFORMANCE OF FUND

Calculate the average percentile rank for one year return.

High average percentile rank -> High Risk

Weight of the four parameters to rank the fund

LONG-TERM PERFORMANCE	CONSISTENCY	DOWNSIDE DEVIATION	RECENT PERFORMANCE
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The above order of parameters is in the decreasing order of weight



Monitoring Ongoing Mutual Funds

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- 01 Regularly compare the ongoing mutual funds with relevant benchmarks such as a market or sector index that tracks a group of selected investments (for example, the S&P 500 Index).
- 02 Review your account statements to see how your investments are doing and keep track of the costs you're paying. Then compare the performance of your funds against your goals and the guidelines set out in your investment policy statement, if you have one.
- 03 Regularly calculating investment risks so that our investment goals and risk appetite stays aligned



Criteria for removal from AIMS platform

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- 01 Underperformance of the fund: consistent underperformance of the fund for over and above 18 months is a point of concern. We can calculate this using the various methods used to rank the fund that was described.
- 02 Change in fund's strategy: investors invest in a fund if their objective is in line with the fund's objective so any change in the strategy is a point of reconsideration of the fund.
- 03 Change in fund manager: the major part of funds performance depends on how well manager is able to manage the funds in extreme situations
- 04 Need for rebalancing your portfolio: investment should be aligned with the risk appetite and financial goals. Therefore timely review is essential.

CONCLUSION

THEREFORE THE TWO STEPS MENTIONED ARE A PART OF THE PROPOSED QUANTITATIVE FRAMEWORK TO:

- SELECT FUNDS FROM AN UNIVERSE.
- MONITOR THEM ON AN ONGOING PROCESS BY PERFORMING RISK ANALYSIS.
- CRITERIA FOR REMOVAL FROM AIMS PLATFORM OF HIGH RISK AND LESS RETURN FUNDS.