MUTUAL FUNDS

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Mutual funds: a simple definition

- A mutual fund is a diversified portfolio of stocks, bonds, and or other securities run by a professional asset manager.
- Investors put their wealth into the fund aiming to obtain a good (positive) return over a sufficiently long period.
- In some cases the management processes are run by a management team.

Mutual funds

- It is not necessary to invest in a mutual funds to build up wealth over time, since each investor can manage its wealth on his own and can obtain a desirable return.
- Investing in mutual funds does not necessarily imply to obtain a strictly positive return.
- However, mutual funds have some characteristics which make them attractive.

Mutual funds

- It is opportune to remember that the fund's asset manager invests the capital but does not bear any investment risk.
- On the contrary, all the risks connected to the investment activity are borne by investors.
- Therefore, it is necessary to offer them some protection mechanisms.
- As such, mutual funds structures provide several safeguards.

Mutual fund organization

- Mutual funds must be registered with the SEC.
- *Shareholders*. The fund is a trust owned by thousands of investors, the only ones that bear the investment risks.
- *Board of directors*. It is elected by shareholders; the board of directors must control the management company and/or the adviser.
  The SEC requires a minimum number of independent members.

Mutual fund organization

- *Management Company*. Usually, the management company is the organizer of the fund and serves also as investment adviser. It deals with the daily organization of the fund.
- *Investment Adviser*. Runs the portfolio in accordance with the "prospectus" (or shareholders contract). The adviser is compensated by the management fee.

Mutual fund organization

- *Independent Custodian*. This role is typically assigned to a bank. The custodian must protect shareholders against theft by management.
- *Transfer Agent*. It handles sales and redemption of fund shares, computes the daily NAV, and handles dividend and capital gain distribution
- *Fund Distributor*. Helps to distribute the fund shares across investors.

The prospectus

- The prospectus describes the key features of a mutual funds.
- Potential investors can request and read the fund's prospectus before making any investment decision.
- There are two types of prospectus:
  - **Statutory** prospectus;
  - **Summary** prospectus.

The statutory prospectus

- The statutory prospectus is the traditional, long-form prospectus.
- Because of the length of the prospectus sometimes they can be tedious to wade through.
- Therefore, the SEC has simplified prospectus requirement, resulting in the Summary prospectus.

The summary prospectus

- The summary prospectus contains the same information of the statutory prospectus.
- However, the former is just few pages long while the latter can be very long and tedious.
- Both the prospectus contain important information and key features of the fund.

Prospectus content – 1/2

Both the prospectus contain the following information:

- Fund's investment objective.
- A description of the investment policy.
- The standard *fee table*.
- Detailed information concerning the portfolio's investment risks.
- The fund's past performances.

Prospectus content – 2/2

In addition, the statutory prospectus indicates:

- Services offered.
- Information concerning the fund's custodian and transfer agent.
- Information on the other portfolios available in the fund family.

Focus: fund's objectives

The primary objectives of any fund would be included into one of the following three categories.

- Income. The attention is on producing a constant flow of dividend payments.
- Capital Gains. The focus is on increasing the value of the principal (the investment) through the appreciation of the stocks held
- Income and Capital Gains. A combination of the first two approaches.

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Advantages of mutual funds

- Professional Management.
  - As we have just told, it is not necessarily to invest in a mutual funds. However, buying a mutual fund share means to take advantage of competencies, skills and experience of the fund's manager.
  - Total returns help investor to judge the fund management.
  - Unsatisfied shareholders can replace the fund management.

Advantages of mutual funds

- Diversification.
  - Collecting small wealth from thousands of investor, the fund manager can build and invest a consistent sum.
  - Therefore, the manager can divide the portfolio across hundreds of assets, giving investors a desirable degree of diversification.

Advantages of mutual funds

- Low Operating Costs.
  - Mutual funds incur proportionately lower trading commissions with respect to the ones incurred by individual investors.
  - Lower transaction costs may reflect into better performances.

Advantages of mutual funds

- Shareholder services.
  - Some mutual funds offer many useful shareholder services.
  - If one want to compound his wealth quickly the fund can re-invest in the fund itself all profits generated (i.e. dividends and capital gains).
  - Another service is the possibility to switch between funds.

Advantages of mutual funds

- Liquidity.
  - It is the capability of the fund to purchase or sell an asset.
  - In order to be liquid, one must not bring high transaction costs (recall that transaction costs include the hit on the price).
  - To limit liquidity risk, mutual funds always keep a percentage (of fund's wealth) in cash with which they satisfy the needs of the investors.

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Mutual funds categories

Open-end funds.

- Open-end funds always stand ready to issue new shares to incoming investors at the current price, or NAV ("Net Asset Value").
- Similarly, open-end funds always stand ready to repurchase or redeem shares from existing shareholders who want back their money.

Mutual funds categories

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Closed-end funds.

- Closed-end funds are publicly traded investment companies.
- They do not stand ready nor to issue new shares neither to repurchase or redeem the existing shares.
- In a such a way, the managed capital is fixed during the life of the funds.
- The share price may be far from the NAV.

Net Asset Value

- What is the NAV?
- The Net Asset Value is the sum of all assets owned by the fund net of liabilities.
- The total net assets is then divided by the number of outstanding shares.
- The result is the "Net Asset Value" per share.

Net Asset Value

Compute the Net Asset Value per share.

- Cash and equivalents – $200,000.
- 10,000 shares of type A - $P_A = \$50$.
- 20,000 shares of type B - $P_B = \$30$.
- 50,000 shares of type C - $P_C = \$08$.
- Liabilities – $100,000
- # of outstanding shares – 100,000

Types of funds

With respect to the management strategy, mutual funds can be classified in:

- Actively-managed funds.

vs

- Passively-managed funds.

Types of funds

Actively-managed funds.

- The actively-managed funds are characterized by the active strategy of the manager.
- Indeed, on the basis of his expectations, fund's asset manager constantly changes the portfolio weights.
- The return on this type of funds depends on the manager's ability to detect and invest in undervalued assets.

Types of funds

Passively-managed funds.

- The passively-managed funds are characterized by the passive strategy of the manager.
- That is, the portfolio manager does not constantly change the portfolio weights.
- On the contrary, the aim of the manager is to replicate perfectly another asset (or a group of assets).

Types of funds

Actively vs. passively-managed funds.

- Investing in an actively-managed portfolio means to invest in the fund manager capability.
- Indeed in such case, investors prefer a fund on the basis of the track record of the manager.
- Investors expect that, whatever will be the market performance, fund managers will be able to give them a positive “excess return”.

Types of funds

Actively vs. passively-managed funds.

- Investing in a passively-managed portfolio means to invest in a particular market.
- That is, investors choose the funds on the basis of their expectation on the market.
- Investors expect that fund managers will be able to give them back exactly the market return.

Types of funds

With respect to the portfolio asset class, fund can be classified into:

- Stock or Equity Funds;
- Money Market Funds;
- Bonds Funds;
- Hybrid Funds.

Types of funds

Equity funds.

- Equity funds invest principally in stocks.
- They can be both actively-managed and passively-managed.
- Stock funds can be divided into more than ten sub-categories by objective.

Types of funds

Equity funds categories.

- Aggressive-Growth mutual F.
  - These funds try to obtain the maximum capital appreciation, even employing speculative strategies.
  - Because of the high expected return, the riskiness of the aggressive-growth funds is quite high.
- Small-Company mutual F.
  - These funds invest in companies with low market cap.

Types of funds

Equity funds categories.

- Growth mutual F.
  - These funds invest in companies with high market cap.
  - They emphasize on capital appreciation.
- Growth and Income mutual F.
  - These funds invest in companies with high market cap.
  - They emphasize on both capital appreciation and the production of regular dividend payments.

Types of funds

Equity funds categories.

- Equity-Income mutual F.
  - These funds invest in companies with high market cap and high dividend yields.
  - They emphasize on the production of regular dividend payments.
  - Because of the low riskiness of the high dividend yield company, these fund are the least volatile (or the less risky equity funds).

Types of funds

Other equity funds categories.

- Hybrid mutual F.
  - Their portfolio is partially invested in bonds.
- Specialty mutual F.
  - Have a specific investment focus (e.g. ethical funds).
- Sector mutual F.
  - The portfolio is typically invested in firms within the same industry (e.g. Housing F.; Health care F.).

Types of funds

Other equity funds categories.

- Stock Market Index mutual F.
  - They aim to replicate the index performance.
  - Therefore the portfolio is invested in the same stocks and with the same weights as in a specific market index.
- International mutual F.
  - Invest in foreign stocks, usually from several countries.

Types of funds

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Money market funds.

- The money market funds invest in the less risky asset classes, namely:
  - Short Term debt instruments, such as Treasury Bill;
  - Commercial paper (short term debt instruments issued by large corporations).
- Because of the high quality of the assets, the expected return is extremely low.

Types of funds

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Bond (Debt) funds.

- Bond funds invest their capital into debt instruments. Specifically, they invest in:
  - Government bonds. B. issued by central government;
  - Municipal bonds. B. issued by local government;
  - Agencies. B. issued by government agencies;
  - Corporate. B. issued by corporation.

Types of funds

Bond (Debt) funds.

- Bond asset class is riskier than the money market asset class.
- Therefore, expected returns on debt funds are higher than the expected returns on money market funds.
- Usually, since bonds are less risky than stocks, the expected return on a debt fund is less than the one on an equity fund.

Mutual funds fees

According to the time fees are charged, it is usual to distinguish between:

- Front-end load.
  Fees charged at the time of purchase.
- Back-end load.
  Fees charged at the time of sell.

Mutual funds fees

In the prospectus, fees are classified into:

- Shareholders fees, paid by each investor directly from his/her investment;
- Annual Fund Operating Expenses, paid each year as a percentage of the value of the investment (or, in other words, as a percentage of the NAV).
- Usually, we refer to the former as direct fees and to the latter as indirect fees.

Shareholders fees

- Sales Loads. Fees charged on investors to compensate the broker who sell the mutual fund's share. Sales loads can be classified into:
  - Front-end sales load, paid at time of purchase.
  - Back-end sales load, paid at time of sell.
- Redemption Fees. Mutual funds charge shareholders when they decide to redeem their shares. Unlike the back-end sales load, the redemption fee is paid directly to the fund, not to the broker.

Shareholders fees

- Exchange Fees. Are sometimes imposed to shareholders when they switch to another fund within the same fund group.
- Account Fees. Are sometimes imposed on investors for the maintenance of their accounts.
- Purchase Fees. It is similar to a front-end sales load. However they differ because the former is paid to the fund while the latter is paid to the broker.

Annual fund operating expenses

- Management Fees. These fees are paid from fund's assets to the fund's investment adviser, for managing the fund's investment portfolio.
- Distribution (or Services or 12b-1) Fees. These fees are paid from fund's assets to cover marketing, advertising and distribution expenses, as well as to cover the printing and mailing of prospectuses to new investors.

Annual fund operating expenses

- <u>Other Expenses</u>. This category contains all the expenses not included in the preceding ones, such as custodial expenses or legal expenses.

- <u>Total Annual fund operating expenses</u>. It represents all the fees and expenses categorized as fund's operating expenses. It is expressed as percentage of the fund's average net assets.

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- Mutual Funds;
- Advantages of Mutual Funds;
- Fund's Categories and Fees;
- Exchange Traded Funds;
- Hedge Funds.

Exchange Traded Funds

- Exchange Traded Funds, or simply ETFs, are investment companies classified as open-end companies.
- Like any other type of investment company, ETFs have a prospectus.
- ETFs that do not deliver any prospectus must give the investors the so called Product Description.

Differences between ETFs and Mutual Funds.

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- Unlike mutual funds, only "Authorized Participants" can purchase and redeem shares directly from the ETF.
- They must trade aggregations or blocks (*e.g.*, 50,000 ETF shares) commonly called "Creation Units."
- A Creation Unit is a basket of financial instruments and cash that is exchanged with ETF shares.

Differences between ETFs and Mutual Funds.

- Once received the share in exchange for the creation units, Authorized Participants can sell them on the secondary market.
- Other investors can purchase and sell the ETFs shares on the secondary market at the market price.
- The market price of ETFs reflects the net asset value per share.

Differences between ETFs and Mutual Funds.

- ETFs have been historically cheaper than mutual funds.
- Mutual funds' shares are redeemable in cash while ETFs' shares are redeemable in-kind. The Authorized Participants can exchange shares for baskets of financial instruments and cash.

Focus: Authorized Participants

The tasks of the Authorized Participants include:

- The construction of the Creation Units.
- The exchange of the Creation Units with the ETFs' shares.
- The opportunity to act as arbitrageur in order to align the value of the fund's shares with the one of its portfolio assets.

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- Mutual Funds;
- Advantages of Mutual Funds;
- Fees;
- Exchange Traded Funds;
- Hedge Funds.

Hedge Funds

- Like mutual funds, hedge funds pool and invest investors' money aiming to give them a positive return.
- Their goal is to give investors positive returns, regardless market returns.
- Because of their goal, hedge funds are the investment companies with the highest level of management activity.

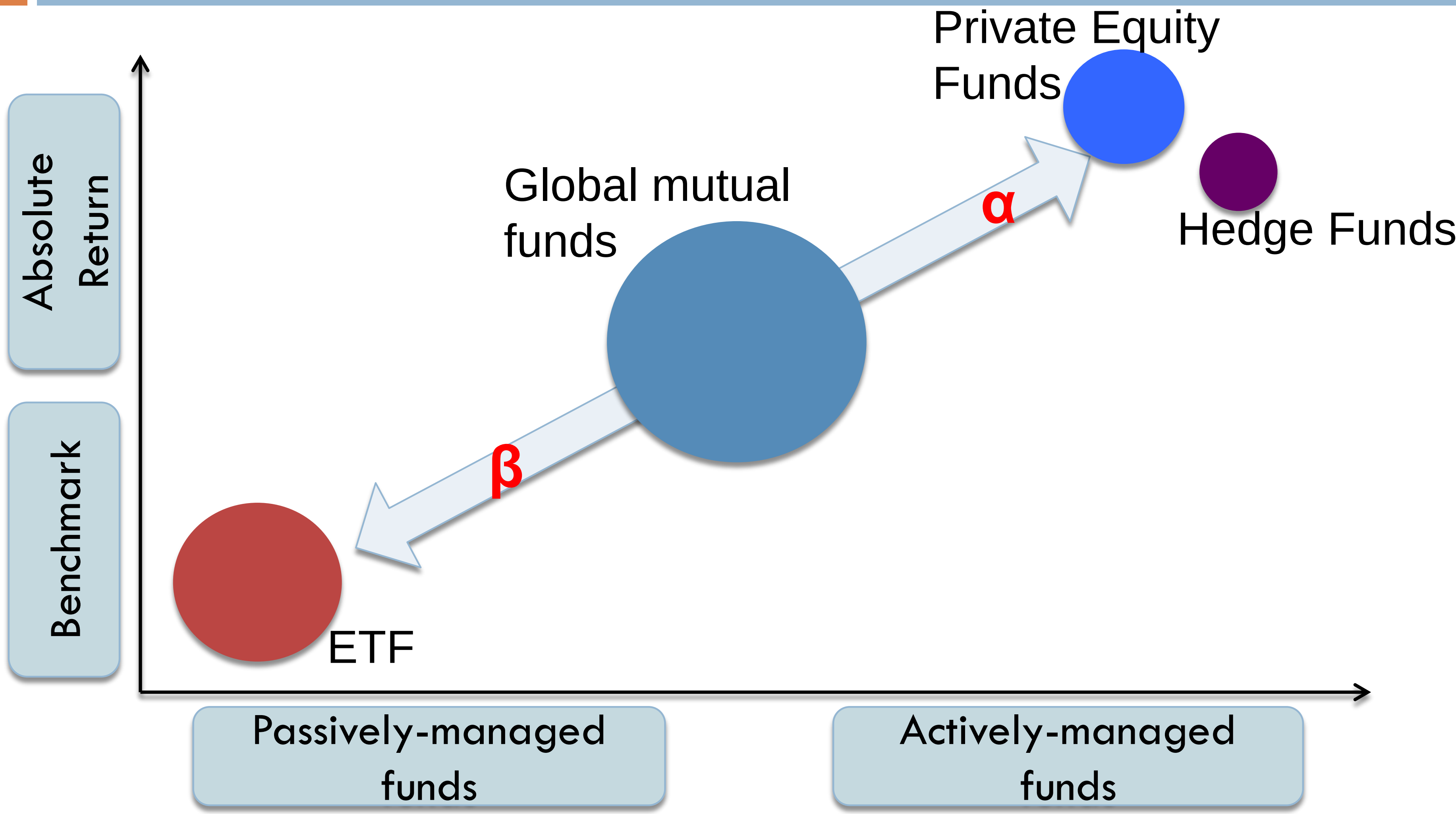
Hedge Funds

- The aim of the hedge funds makes them the riskiest investment companies.
- Therefore, only accredited investors can purchase HF shares.
- Accredited investors include institutional investors, such as pension funds and insurance companies, and wealthy individuals.

Hedge Funds

- Unlike mutual funds, hedge funds are not subject to some of the regulations designed to protect investors.
- Moreover, despite their name, hedge funds are not immune to risk.

Funds Recap


Private Equity Funds
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