# 9.2: Mutual Funds

A Mutual Fund is a pooled investment portfolio managed by a professional portfolio manager (or management team). Each investor in the mutual fund owns a pro-rated amount of the overall portfolio based on their contributions to the fund over time. The portfolio manager will invest these funds according to specific guidelines.

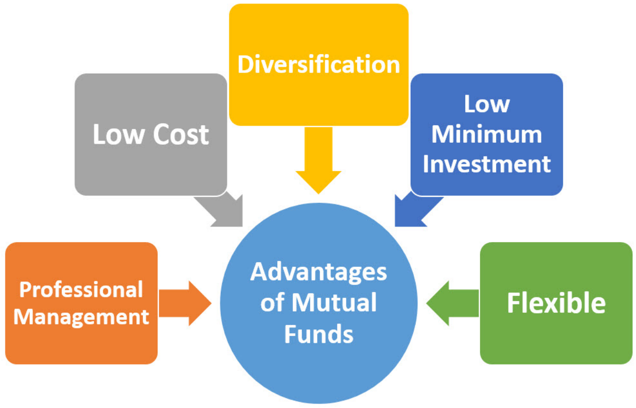


Figure 9.2.1: Advantages of Mutual Funds

## Advantages of Mutual Funds

### Professional Management

Most people do not want to make investing for their financial goals a full-time career. A mutual fund allows them to hire someone who has significant training, support and resources to make the decisions of which securities to own and when to buy/sell those securities.

### Low Cost

While the costs vary dramatically from one mutual fund to the next, most mutual funds are managed at a relatively low cost to investors. The specific costs will be discussed in greater detail below.

### Diversification

By pooling the investment dollars from many investors, mutual funds allow individual investors with small amounts of capital to own diversified portfolios usually containing more than 100 individual securities.

### Low Minimum Investment

Most mutual funds can be started with investments of $500 – $2500. Also, some mutual funds will allow you to start with even less than that if you agree to contribute a fixed amount each month.

### Flexible and Easily Tailored to Your Needs

There are approximately 8000 different mutual funds available with different objectives and risk profiles. With so many options available, it is easy to find a mutual fund or a combination of a few mutual funds to meet your specific goals for risk and performance.

## Major Mutual Fund Categories

### Money Market Mutual Funds

Money market mutual funds are extremely low risk investments, but also offer low rates of return. It is extremely rare to lose money in a MMMF and most maintain a fixed price of $1.00 per share while offering their investors low interest payments. As of January 2021, most MMMF are yielding less than 1.00% annual rates of return due to the Federal Reserve's easing of monetary policy to combat the economic impacts of the COVID-19 pandemic. The rates of return will tend to fluctuate with short-term interest rates. Historically, MMMF have averaged returns of 2%-4%, but as of the start of 2021, it has been several years since we've been at those levels for any sustainable time frame.

### Bond Funds

Bond mutual funds can range from low to moderately high levels of risk. At the low-risk end, the mutual fund will invest in short-term US Treasury bonds. While low risk, these funds will typically offer low rates of return only marginally higher than a MMMF. At the higher-risk end, the mutual fund will invest in junk bonds issued by corporations. In exchange for the higher risk, returns on these funds can be significantly higher than most bond funds. Bond funds can lose money when (A) interest rates increase and/or (B) the bonds suffer from defaults. Funds that focus on Treasury bonds will eliminate the default risk and funds that invest in shorter-term bonds will have less interest rate risk. Historically, bond funds have averaged returns of 4%-9% depending on the level of risk exposure. For the 10 years concluding in 2019, the [Vanguard Total Bond Market Fund] earned an average return of 3.68%, while [their High-Yield Corporate Bond Fund] earned 7.10% per year.

### Stock Funds

Stock mutual funds are the most common type of mutual fund. These tend to be the riskiest type of fund as they invest in common stocks. However, the risk can range quite a bit within the stock fund category depending on how aggressive or conservative the style of the fund. Over time, you can expect the average stock fund to earn rates of 7%-13% with quite a bit of variance between funds and across time frames. For the 10 years concluding in 2019, the [Vanguard Total Market Index Fund] has earned 13.43% as a rate of return. However, during the period from February 19, 2020 to March 23, 2020, it lost 35% of its value. Alternatively, for the entire 2020 year, it was up approximately 20% on the year. This provides a glimpse of the volatility associated with stock funds.

### Hybrid Funds

Hybrid funds combine a mix of asset classes and are often a combination of stocks and bonds. This provides less risk and greater diversification, but also lowers expected returns. The average returns for hybrid funds are typically in the 5-9% range. The [Vanguard Balanced Index Fund] earned an average annual return of 9.54% for the 10 year period ending in 2019.

### Lifecycle Funds

A lifecycle fund picks a set "retirement" date and manages the risk exposure accordingly. So, if you plan to retire in 2050 you could buy a fund with that target date. As of 2020, retirement would be about 30 years away so the fund would have higher risk (heavy equity exposure). Over time, the amount allocated to equities would decrease and the amount allocated to bonds and money-market instruments would increase, lowering the risk (and expected return) as you move closer to retirement. For example, as of the summer of 2020, the [Fidelity 2050 Freedom Fund] had about 51% domestic equities, 40% international equities, and about 9% bonds/money-market securities. Alternatively at that same time, the [Fidelity 2015 Freedom Fund] had about 23% domestic equities, 21% international equities, 41% bonds, and 15% money market securities. The idea is to create a passive fund that requires little management from investors (saving the investor time and preventing investors from ignoring their asset allocation and ending up taking too much or too little risk than they planned). The downsides include slightly higher expenses, less control over your asset allocation, and the inability to pick specific stock-based or bond-based funds within the mix.

The chart below shows the percent of total net assets held by US mutual funds at the end of 2019.

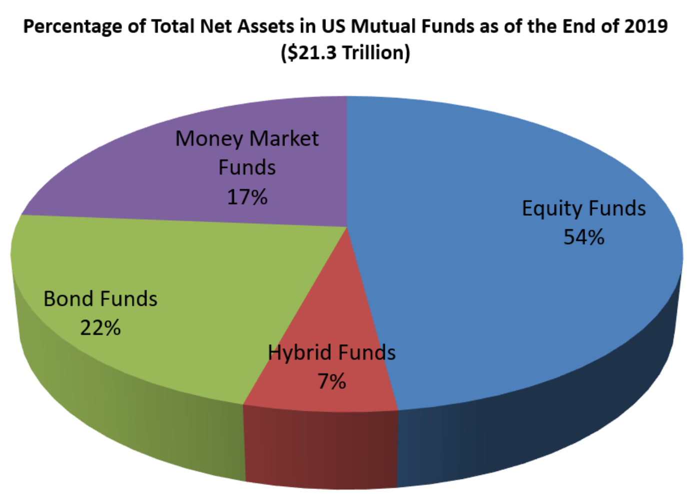


Figure 9.2.2: Total assets in US Mutual Funds at the end of 2019 [$21.3 Trillion]

Source: 2019 Investment Company Factbook

## Mutual Fund Terminology

### Prospectus

The prospectus of the mutual fund tells you all the important information you need to know. Here is a link to the prospectus for the Fidelity Magellan Fund. It discusses the investment style of the fund, the risk level of the fund, the various costs of the funds and much more. While some of it can get quite technical, most of the important information in the prospectus is presented in a “friendly” format. Read it before investing!

### Load Charge

A load charge is an upfront fee that is taken from your investment. Load charges are usually used to help pay for the sales costs associated with marketing mutual funds. By law, mutual funds can not charge more than 8.5% of a load charge. If a fund charges a 5% load and we invest $1000 into the fund, $50 will be taken out as a load fee and $950 will actually be invested in the fund. Some funds do not charge sales loads (they are called “no-load” funds). The article, No-Load Funds vs Load Funds has a more in-depth discussion on load charges for those interested.

### Expense Ratio

The expense ratio is the amount of money taken out on an annual basis to cover the funds operating expenses (pays portfolio manager, customer service reps, overhead, profit, etc.). This can range from around 0.05% at the low end up to over 2% at the high end (the average is right around 1%). If the mutual fund with a 1% expense ratio earns a 12% return before the expense ratio, it will result in a return to investors after expenses of 11%. The article, Definition and Explanation of Mutual Fund Expense Ratios, offers more details on mutual fund expense ratios.

### A,B,C Shares

Some funds are sold with various expense packages known as “A”, “B” or “C” shares that are used to pay the brokers/advisors who sell these shares. “A” shares have higher front-end load charges, “B” shares have higher annual expenses and back-end loads (and often convert to “A” shares over time), and “C” shares typically avoid load charges but have higher annual expenses. For short-term holdings, C shares would be better. For longer-term holdings, A shares are best. Investopedia has a discussion on mutual fund share classes that adds more detail.

### Fund Families

Many mutual funds are parts of a large “fund family.” For example, Fidelity is one of the largest fund families and they offer well over 100 different mutual funds. Other large fund families include, but are not limited to, Vanguard, American Century Investors, T. Rowe Price, and Blackrock.

### ETFs

An Exchange Traded Fund (ETF) is a stock/mutual fund hybrid. It trades like a stock in that you can buy/sell it at any time of the trading day (mutual fund contributions and withdraws are only done based on end-of-the-day pricing), but each share you buy represents a basket (portfolio) of underlying stocks. The underlying portfolio depends on the ETF, but some try to match indices (such as the S&P 500 or Dow Jones Industrial Average), international indices (so you can get exposure to China, India, Brazil or other countries without worrying about picking individual stocks), sectors (such as financials, biotechnology, retail, etc.), or other characteristics (short funds that go up when the market is down and down when the market is up, high dividend yield stocks, etc). ETFs tend to have relatively low expense ratios and tend to use more passive stock selection (not trying to pick the “best” stocks but just hold a basket of stocks meeting the objective). More discussion on ETFs can be found in the article, Exchange-Traded Funds.

## Tips for Mutual Fund Investing

### Consider Your Goals First


Before picking a mutual fund to invest in, you need to know what you’re trying to accomplish. What time frame are you looking at? What level of risk are you comfortable with? What rate of return do you need to earn? Once you know this, you can start picking mutual funds that meet your needs. Choosing the right mix of exposure to stocks, bonds, international securities, etc. to match your risk-return goals is more important than choosing the “right” fund. With so many funds out there, you can be confident that you ***won’t*** choose the best fund without getting very lucky. However, don’t worry about getting the best one and instead focus on a good fund (or funds) that meet ***your*** needs.

### Bad Performance Persists

The worst mutual funds tend to stay bad. Part of the reason for being a bad mutual fund this year is having high costs. These costs don’t go away, so eliminate the worst performing 25% of funds over the past few years within a particular category from consideration.

### Don’t Chase Hot Funds

A big mistake a lot of investors make is trying to invest in whatever last year’s top fund was. While bad performance persists, there is less persistence among the top performers. Usually the top performing funds for a given year are not very diversified and will do poorly when trends change. Here is a brief look at mutual fund performance persistence. Keep in mind that switching funds may also increase your load charges and trading costs.

### Focus on Costs

Most mutual funds fail to outperform the averages because of diversification and costs. If we focus on funds that have low costs (loads and expense ratios) we will keep more of the investment return instead of paying it to the mutual fund company. Index funds tend to be the lowest cost type of funds and small-cap or international funds tend to be the most expense. Look closely at the expense ratio. Assuming a 9% pre-expense ratio return, the difference between a mutual fund with a 0.50% expense ratio and one with a 1.25% expense ratio will be $47,993 to an investor that invests $3000 per year over 30 years ($372,644 vs. $324,651). For a long-term investor adding to their mutual fund on a regular basis, load charges are less important than expense ratios. Consider two mutual funds that both charge a 1% expense ratio and earn 9% before any expenses. One fund charges a 5% load while the other is a no-load fund. If we invest $3000 in each fund each year over 30 years, the no load fund will have $339,850 vs. $322,857 for the load fund (a cost of $16,993). Notice this difference is much less than our previous example with different expense ratios.

### Think Long-Term

Try to focus on your long-term returns instead of annual fluctuations. Studies have shown that investors tend to underperform the mutual funds that they invest in by about 1.1% per year due to poor market timing (selling low and buying high)

### Consider Some International Exposure

While markets are more interconnected than they were 20-30 years ago, there is still some advantage to international diversification. Having some exposure to emerging markets and other global economies will help diversify your portfolio and also offer the opportunity for higher returns.

### Calculating Impact of Load Charges and Expense Ratios

Remember that the load charge impacts the amount of your contribution and the expense ratio impacts the rate or return. So, in order to calculate the impact, we can use the 5-key approach on our calculator. Assume you are dealing with a mutual fund that has a 4% sales load and a 1.25% expense ratio. If you invest $10,000 today and $200 per month for 30 years, how much are these costing you if the fund earns 10% before any fees?

Calculate FV without any fees (Calculator set to 12 P/Y):

> 360 N
> 10 I/Y
> 10,000 PV
> 200 PMT
> ⇒ FV = $650,471.58

Calculate FV with fees – 1.25% expense ratio and 4% load charge. (Calculator set to 12 P/Y):

> 360 N
> 8.75 I/Y
> 9,600 PV
> 192 PMT
> ⇒ FV = $464,984.97

Total Cost ⇒ $185,486.61

---

9.2: Mutual Funds is shared under a not declared license and was authored, remixed, and/or curated by LibreTexts.

- **9: Mutual Funds, IRAs and 401(k) Plans** is licensed CC BY-NC 4.0.