

Before talking about mutual funds, I'd like you to watch this brokerage commercial. He said shut up to me last night at the dinner table. Oh, the market's closing. Oh, no. It doesn't close until 9:30. No, not that market. Let's get a move on. Come on. OK, here I come. Darren, Sharron, clear out. Mama's got to trade. Ameritrade.com and logging in, great. Let me see what the markets doing today. Wow, markets up. Woo-hoo! Yes. Wonderful. Die! Isn't he cute? Settle down. He's very gifted. And I just want to track this little biotech company that I've been looking at. Scientific. OK. I've got to sell. Right now you're going to sell it. Just like that? And done. I think I just made about \$1700. Yay! Way to go, mom! That must have cost you a lot of money. \$8 a trade. No. Yes. Get out of here. \$8? Serious. You know something about me that I never told you? What's that? I have a mutual funds.

All right. We've got two women in this ad. There is mom. She's a little better looking, has a little more makeup on. And her neighbor. You might have missed this but at the beginning of the ad the neighbor says, my kids talked back to me at the dinner table last night. Mom says, the market's closing. The neighbor assumes it's the supermarket but, of course, mom's talking about the stock market. They get back to her house, she shoves her kids off the computer. Click, click, click, mom makes \$1,700 trading an under-diversified portfolio of risky stocks. Some little biotech company she's been following. Meanwhile, what are her kids doing? Boom, boom. You know, they're shooting off these toy rifles with foam rubber projectiles. One of these things bounces off of the mom's forehead. She doesn't flinch. She's in control in a male-dominated warlike environment. Meanwhile, her neighbor is flinching as these toys shoot off. At the end of the ad the neighbor tells us what? She tells us that she invests in mutual funds. We find out that a woman whose kids talk back to her, and who is intimidated by toys, invests in mutual funds. The message in this ad is that mutual funds are for losers. And that's really the wrong message.

Mutual funds, and especially low-cost index funds, are the best investment for the vast majority of investors. So let's say you're saving every month for a long-term goal, such as retirement. What do you do with your money? Do you stuff it under a mattress? Do you park it in a bank account? No. You should buy-and-hold mutual funds. And in particular, index funds. An index fund is a mutual fund that tracks an index. But what's a mutual fund? And what's an index? Mutual funds are investment companies. They are the simplest and most economical way to own a diversified portfolio, even if you have a small amount to invest. You can buy shares of a mutual fund. The fund then pools your money with the money of other investors and buy stocks, bonds, or other securities. The value of your investment goes up and down with the value of the securities the mutual fund owns. Mutual funds take three forms. Open-ended mutual funds, exchange-traded funds, and closed-end funds.

I'm not going to discuss closed-end funds in this video since they're not appropriate investments for most people. Open-end mutual funds are the most common type of mutual fund. They can be bought and sold directly from mutual fund companies, such as Vanguard, Fidelity, T. Rowe Price. Or you can purchase them through a financial advisor or a brokerage firm such as Schwab, E-Trade, or Morgan Stanley. Exchange-traded funds are bought and sold through a financial advisor, a brokerage firm, or a mutual fund company, in much the same way that stocks are bought and sold. Most open-end mutual funds and some exchange-traded funds are actively managed. An actively managed fund hires a portfolio manager who picks the stocks, bonds, or other securities. The manager tries to beat a benchmark comprised of stocks representative of the types of securities it buys. Typically, the benchmark is a market index, such as the S&P 500. An index is simply a list of stocks, bonds, or other securities. The S&P 500 is a list of the 500-- or 500 of the largest US companies. The price of these companies is averaged to get the index value. And the averaging puts more weight on larger companies. The companies in the S&P 500 represent about 75% of the value of all publicly traded US companies. This is the most common benchmark for mutual fund companies to try to beat.

Index fund simply buy all, or a representative sample of the stocks or bonds in an index, so as to achieve the same return as the index. Buying an index fund is a form of passive investing. Passive, because you're not trying to beat the market. Now you might think you'd be better off buying a fund with a manager who's trying to beat an index than you would with a fund that simply trying to match the index. But you'd be wrong. On average, a greater number of actively managed funds underperform in the market each year than outperform it. So can't an investor win by simply buying an actively managed mutual funds that have performed the best in the past? Unfortunately, no. While some mutual funds consistently underperform the market, over a horizon of several years, good performance by actively managed mutual funds is no more persistent than you would expect from pure luck. So why do active managers underperform?

There are several reasons, but the most important is that there are simply too many people, spending too much time, and too much money trying to beat the US market. There just aren't enough opportunities to exploit. It's like a whole lot of miners looking for a single nugget of gold. You know, some managers do have skill. But it's hard to tell the skilled managers from the ones who have simply been lucky. And even skilled managers struggle to beat the US market index. So here are some of the advantages of index funds over actively managed funds. One, index funds that track major indices are better diversified than most actively managed funds.

Two, you can buy index funds that charge much lower fees than actively managed funds. Three, index funds have lower trading costs than most actively managed funds. Trading costs include things such as commissions. And these costs are paid by investors in the fund. You. Why do index funds have lower trading costs than actively managed funds? Because they tend to trade very little. Most actively managed funds trade more often because they are pursuing investment strategies that rely on buying and selling. And finally, the low trading rates on index funds make them more tax-efficient than most mutual funds. This isn't an issue for funds that are held in tax-deferred retirement accounts, such as IRAs, SEP IRAs, ROTH IRAs, 401k's or 403b's. But it does-- all of which, by the way, we're going to be talking about in the course-- but it does matter for funds held in taxable accounts.

Let's talk about what you don't want to focus on when you buy a mutual fund. Past performance. Most investors spend their lives buying and selling what they wish they had bought last year. But last year's

performance is not a good predictor of what's going to happen this year. And whether they're trying to time the market or pick individual stocks, individual investors tend to get it wrong more often than they get it right. So forget about last year's performance and focus on diversification, fees, and asset allocation. Asset allocation refers to the mix of different classes of investments in your overall portfolio. For example, how much do you invest in stocks and how much in bonds? We have a separate video discussing asset allocation.

Diversification means reducing the risk related to any one company by holding a variety of stocks or bonds. There is also a short video on diversification on the course website. The fees you pay when investing are very important. Fortunately, they're also under your control. But you have to pay attention. In general, index funds-- the funds I'm suggesting you buy-- have lower fees than actively managed funds. But even index funds that are tracking the same index may charge different fees, leading to big differences in how much money you have. For example, the DWS S&P 500 index fund charges a commission, often referred to as a load, of 4.5% when you buy the fund. That's \$45 on a \$1,000 investment. Every year the fund charges 0.67% in expenses, usually called the expense ratio. That \$6.70 for every \$1,000 you invest. Might not sound like much, but the Vanguard 500 index fund (Admiral Class shares) charges no commission. And every year, the fund charges .05% 5% in expenses? How much is 0.5%? It's only \$0.50 for every \$1,000 you invest in the fund. Let's see just how much difference these fees could make to your portfolio.

Suppose you invest \$20,000 in the Vanguard 500 index fund Admiral Class shares, and hold this investment for 20 years. Now, nobody knows what the market's going to do over the next 20 years. But let's just assume that the return on the S&P 500 for each of these 20 years is 8%. At the end of 20 years your \$20,000 investment will be worth \$92,292. What if, at the same time, you invest another \$20,000 in the DWS S&P 500 index fund class A shares, and you hold that investment for the same 20 years? At the end of 20 years your investment will be worth \$77,705. Remember, both funds are tracking the same index. The only difference is the fees they charge. But what a difference. Over 20 years you earned \$14,587 more with the Vanguard fund. An additional \$14,587 on an initial investment of \$20,000. Fees really matter. You can get great diversification and low fees by buying either open-end index funds or exchange-traded index funds. So which should you buy? In many ways it doesn't matter a whole lot. But there is one difference worth considering.

Each time you buy an exchange-traded fund, or ETF, you're paying a cost called the spread, and you may be paying a commission. The spread is the difference between the price at which you can buy and you can sell a security, such as a stock or an exchange-traded fund. For large, well-diversified, exchange-traded funds that track major indices, such as the S&P 500, spreads are really, really small. They don't matter much. Commissions also tend to be low these days, at least at discount brokerages. However, if you are buying ETFs every month as you save for the future, the commissions could add up. The good news is you can find brokerage platforms and mutual fund companies that sell ETFs commission free. But remember, you also want to check the fund's expense ratio. Buy index funds either directly from a mutual fund company or as exchange-traded funds without commissions. Make sure that you're buying funds that track large indices such as the S&P 500 or an all market index. Compare expense ratios of funds that track the same index. So how high should your expense ratios be? As mentioned before, the Vanguard 500 index fund Admiral Class shares have an expense ratio-- an annual expense ratio of only 0.05%. \$0.50 for every \$1,000 you have in the

fund. That's pretty low. But to get that rate you're going to need to make a minimum investment of \$10,000.

If you invest less you'll pay a slightly higher expense ratio. Generally, funds that track the S&P 500 index or that track large US bond indices have the lowest expense ratios. Funds that track indices which include small stocks or foreign stocks charge higher expenses, because it's more costly and difficult to run such funds. However, including small and foreign stocks in your profile has historically increased perfectly or returns. Don't compare apples and oranges. When you compare fees on index funds, make sure the funds are tracking the same, or very similar, indices. What shouldn't you buy? Don't buy index funds that track particular industries, such as biotech. You're simply speculating. Don't buy funds that track the market in a single country, unless it's the US or the country you live in. Don't buy funds that bet that the market or a market segment is going to go down. And don't buy funds that use leverage. That is, borrowed money. For example, here's an ETF that lets you make a leveraged bet that gold mining stocks are going to go down. It's called the Direxion Daily Gold Miners Bear 3x Shares. You're using borrowed money to bet that these companies are going down. This isn't an investment. This is speculation. In fact, you can bet the other way. If you don't like the black, you can bet on the red. You can buy the Direxion Daily Gold Miners Bull 3x Shares and use borrowed money to bet that these same companies are going to go up. These are under-diversified leveraged bets disguised as exchange-traded funds. Watch out. Not all ETFs are well diversified index funds.

Seven years ago, I was in Santa Fe having lunch with Bill Miller. Bill is one of the top mutual fund managers of all time. I've known Bill for several years. He's an incredibly smart guy. At the time, he had the best track record of any fund manager in the country. Morningstar named him the fund manager of the decade. I was sitting at lunch and I thought to myself, Bill's the real thing. I should invest in his fund. But I decided that it was more important to practice what I preach and stick with my index funds. As it turns out, I dodged a bullet on that one. Bill got blindsided by the financial crisis and his fund lost more than the market did. You know, I still think that Bill is an incredibly smart guy. And his fund did recoup some of its losses after the crisis eased. What I know though is that I can't time markets, stocks, or fund managers. And I shouldn't try to do so. What I can do is diversify and pay low fees. And so can you.