

Buy Low and Sell High (please do not do the opposite)

This is a simple and useful investment approach that, I am happy to report, the media generally explains correctly. That the media is willing to explain it correctly is related to the fact that this approach does not take a lot of work. Conceptually, it is pretty straightforward:

1. Buy a mutual fund (or equivalent) when the price is relatively low.
2. Sell a mutual fund (or equivalent) when the price is relatively high.
3. Repeat.

There is some technique involved (what do "relatively low" and "relatively high" mean, exactly?), which we will explain below. By way of warning, however, we must note that, while the media explain this correctly, actual people usually get it wrong. The problem is that, while this approach does not take a lot of work, it does take a lot of discipline. If you don't stick to the game plan you can get in trouble. Before getting into the specifics of the game plan, let's talk about what not to do.

How to Lose Money In the Stock Market

There are many ways to lose money on the stock market. One way seems to be particularly popular. People who invest based on gut instinct (also known as runaway emotions, "moxie," stupidity, "cojones," insanity...) tend to go with this approach. Here are the "how to lose money" rules:

1. If a stock (or a mutual fund) increases in price, it is a "hot stock." Buy it. (This should be known as buying high, but it isn't).
2. If a stock (or a mutual fund) goes down in price, it must be a lousy stock. Sell it. (This should be known as selling low, but it isn't).
3. Repeat until you are out of money.

As you can (hopefully) see, buying based on emotion means buying at a high price and selling at a low price. As soon as everyone notices that a stock is "hot" it has already gone up in price and the party is probably over. While the emotion-driven investors are buying more, the disciplined investors are selling. And, while a big drop in stock prices scares most people, disciplined investors generally recognize a price drop as a buying opportunity.

How to Make Money In the Stock Market

The key to buying low and selling high is to have a consistent, sensible definition of "low" and "high." Here is how it works.

1. Invest in two or more broad mutual funds or the equivalent, such exchange-traded funds, with a mix of stock and bond funds. By "broad," I mean a fund that represents a large sector of the economy and which therefore will not crash because of the foolish mistakes of a single company organization (personally, I regard buying stock in individual companies as gambling rather than investing). For example one might invest \$10,000 in a fund that mirrors the S&P 500 (a "large capitalization," large company fund), \$10,000 in an extended market fund that is designed to cover over 3000 smaller companies *not* in the S&P 500, and \$10,000 in a broad market bond fund, such as the Vanguard Total Bond Market Index Fund. So now you have \$10000 in A, \$10000 in B and \$10000 in C.
2. Once every two months or so, see if the balance has changed. Maybe now you have 10700 in A (A has gone up in price), 10200 in B, and 9700 in C (the price of C has dropped). If the balance has changed by more than a few percent (here it is off by about 5 percent), then trade some pricy stock

for cheap stock, restoring the original balance. This is called "rebalancing" and is a way of selling relatively high-priced stocks and buying relatively low-priced stocks. In this example, you now have \$10200 in A, \$10200 in B and \$10200 in C. It may seem like you are not getting ahead on this step, but in fact you have sold a small number of high-priced A shares and bought a larger number of low-priced C shares. With more shares you will get more profit as the market generally rises over time.

3. Repeat step 2.

There are a number of subtleties. First, the balance should generally be of stock and bond funds (not just stock funds), because bonds tend to go down when stocks go up. Second, you should have more stocks than bonds, because stocks tend to rise (and fall) faster than bonds. One rule of thumb is that the percentage of (low-risk, low reward) bond funds in your portfolio should not exceed your age. When you are young, go with mostly stocks. This is riskier but, because you are young, you have time to make up for any big market crashes over time. Having more on bonds reduces risk, but also reduces return. Over a long time, a too-conservative approach misses out on a lot of profit. To my mind 25 percent in bonds makes sense at age 0-30, 33 percent makes sense at age 31-60, and 50 percent makes sense at ages over 60. However, these percentages are based on the idea that these three funds are your entire investment portfolio. More on that below.

Caveats and Pitfalls

1. This is not foolproof in the short run (less than ten years), but does seem to be close to foolproof in the long run (ten years or more). In the short run, the entire market can go very far up or down. In the crash of 2008, a typical investor lost nearly 50 percent of her portfolio. Emotional investors freaked out and sold everything at that very low price. Disciplined investors rebalanced and made their money back within two years or so.

2. The stock/bond percentages discussed above are based on the idea that these three funds are your entire investment portfolio. If you are saving for retirement, then other sources of retirement income, such as Social Security or a pension, should be taken into account. For these purposes, a pension that provides income of 5,000 per year is roughly equivalent to having \$100,000 invested. This is based on the idea that one can typically take 5 percent per year out of a well-managed investment portfolio without withdrawing the principal investment.

In our example above, we had \$20,000 in "risky" stock funds and \$10,000 in "conservative" bond funds. However, because our \$5,000/year pension is like having another \$100,000 in a conservative investment, we now have an equivalent investment portfolio (or retirement fund) of \$130,000, only \$20,000 of which is in high-risk, high-reward stock funds. That's too little risk and too little reward. In this situation it makes sense to invest all of the \$30,000 in two or more stock funds.

3. In order for this to work well, the funds that you choose (called A, B, and C above) should not have a lot of overlap. For example, based on the (sort-of) adage that evil is the root of all money, you might choose the an energy sector fund for A and the financial sector for B. For C, maybe you choose an index fund that mimics the stock mix in the S&P 500 (that is, 500 of the largest USA-based corporations). The problem with this is that the S&P 500 probably includes a lot of large oil companies and investment firms so C will likely fall in price when A or B falls in price. This increases the likelihood that all three, A, B, and C will rise or fall together, which is no fun at all.

4. Buying and selling stocks costs money (a typical fee is about \$25, the price of a meal in an inexpensive restaurant), so it is a mistake to trade often or to trade small amounts (less than \$500). Some low cost mutual funds disallow frequent trading. That is, if you buy (or sell) stock in Fund A,

you are required to agree not to sell (or buy) Fund A for a specified period of time. For Vanguard's low cost funds, for example, this period is 45 days.

5. The costs associated with investing are important. A typical 401(k) program is managed by an investment company that charges fees. Typical fees are 0.5 to 1.0 percent per year (that's a percentage of the money invested). This may seem small, but a 1 percent cost can add up.

For example, a disciplined investor should be able to bring in 8 percent per year, on average, enough to grow her principal fast to keep up with inflation (typically 3 percent, but less lately) and still have the option of taking out 5 percent for living or other expenses. These withdrawals would be appropriate if she has saved enough to retire or otherwise has met her goal for saving. However, if investment-manager fees take out 1 percent, then that 5 percent for living expenses becomes 4 percent. That is, the person in our example needs to be able to get by with 20 percent less retirement income.

The cost of that 1 percent fee is even bigger if it is applied over years. Imagine you began investing in the year 1999, with reliable returns of 8 percent. With a 1% fee, that return is effectively reduced to 7%. Here is an example of 7% (with the fee) versus 8 percent (without the fee) returns:

Year	Principal + 7%	Principal + 8%
1999	10,000	10,000
2000	10,700	10,800
2001	11,449	11,664
2002	12,250	12,597
2003	13,108	13,605
2004	14,026	14,693
2005	15,007	15,869
2006	16,058	17,138
2007	17,182	18,509
2008	18,384	19,990
2009	19,672	21,589

8 percent is better! (Duh.) If possible, choose a low-cost, often called "no load," investment firm to handle your money.

Finally, I should point out that one of the many perks of having a job with the federal government (there are downsides, too) is that the federal 401(k) equivalent, the Federal Early Retirement System, charges fees of about 0.01 percent. I know of no other place to put your money that has fees that low. If you have money in FERS, keep it there. I once attended a retirement seminar where I was told that I should, after retirement, move my money to some other investment firm. I asked why I should be so stupid as to begin paying fees on the money I had saved up over a lifetime of working, and was told that the many investment options offered by other investment firms would produce returns that would more than make up for any small fees. The person who told me that was lying to me.