

How to calculate the minimum sensible transaction size in your online broker account?

Your goal is to minimize the cost of investing. Every extra dollar it costs you reduces your investment income and makes it more difficult to reach your financial goals.

Key takeaway: A sensible transaction size when you pay commission is a way to control your investing cost. It's a function of how big the commission is and how long you hold the investment. There is no right or wrong answer - it depends on the cost of alternatives. Our example suggests this rule of thumb: If you have to pay commission, you should try to keep your round-trip cost at less than 0.2% (commission to buy plus commission to sell, divided by your transaction size).

Here's how to think about it. Let's say you have \$1,000 to add to your investment account. Let's assume you pay \$5 commission on both buy and sell trades. When you buy ETFs, you still have to pay the annual MER - every year. Let's say your ETF charges 0.23% MER (it's the average of ETFs shown in our research table). For simplicity, we assume your investment stays at the same value for 10 years. In reality, it would grow as you reinvest investment income (which means you'd pay more in dollar MER).

Step 1. What's your cost?

Let's look at the second column (\$1,000 transaction).

- Your commission is 0.5% (5 divided by 1000).
- You'll pay it twice, when buying and selling. So a round-trip commission will be 1% in our example (5+5 divided by 1000).
- Including the 0.23% annual MER, if you hold your investment for one year, your cost will be 1.23% (1% plus 0.23%).
- But if you hold it for 10 years, your annual cost will decline to 0.33% per year. You do pay the 0.23% MER every year but the \$10 round-trip commission is now spread over 10 years (\$1 per year, or 0.1% on the entire \$1,000 investment).

Now look at the third and fourth columns.

- The total percent cost gets lower and lower.
- Percentage MER is the same, but the same round-trip dollar commission is lower: 0.5% (5+5 divided by 2000) and 0.2% (5+5 divided by 5000).

# years	Total % cost per year (round-trip commission + MER) for various transaction sizes		
	\$1,000	\$2,000	\$5,000
1	1.23%	0.73%	0.43%
2	0.73%	0.48%	0.33%
3	0.56%	0.40%	0.30%
4	0.48%	0.36%	0.28%
5	0.43%	0.33%	0.27%
6	0.40%	0.31%	0.26%
7	0.37%	0.30%	0.26%
8	0.36%	0.29%	0.26%
9	0.34%	0.29%	0.25%
10	0.33%	0.28%	0.25%

Step 2. How does that compare to alternatives?

For example, if you used our ready-made individual mutual funds approach, the average cost for a diversified portfolio would be about 0.44% per year.

- You'd reach that cost if you held your \$1,000 ETF trade for 5 years.
- If your trade is \$2,000, you'd be breaking even with a mutual fund investment if you hold it for 3 years (which wouldn't do anyway in most situations - it's just a way to measure and compare cost).
- With a \$5,000 transaction you are better off starting in year 1.