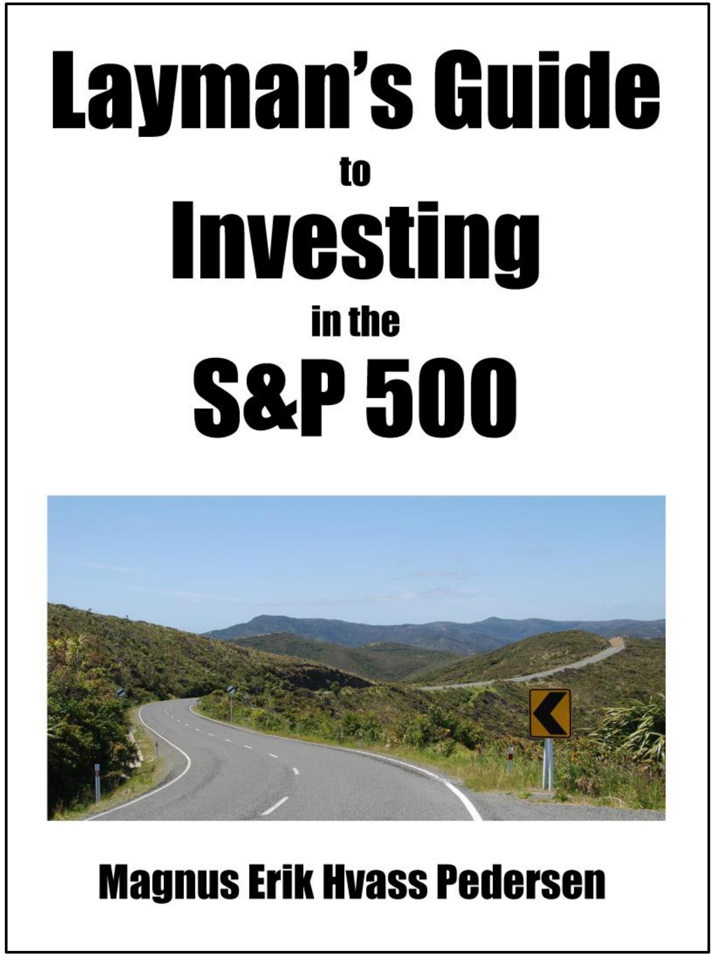

Expense Ratios for Index Funds

By

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Fees and Commissions

- An index fund tries to match the performance of a stock index such as the S&P 500 which covers 500 of the largest companies in USA.
- You pay fees and commissions when you invest in the fund.
- It is **VERY** important that these fees and commissions are very low.
- If the fees are 10% of the amount you invest, then it will take you more than a year on average to earn it back from the S&P 500.
- If the fees are 1% of the amount you invest, then it will take you a few months on average to earn them back from the S&P 500.

Expense Ratios

- The company that manages the index fund also has expenses for buying and selling stocks, pay employees, offices, accounting, etc.
- These expenses are paid by the fund's investors through deductions from the fund's invested assets.
- This means there is less invested in the index e.g. the S&P 500.
- A small expense will compound into a massive expense over time.
- It is **VERY** important that the expense ratio is **VERY** low.

Expense Ratio of 0.05% (Vanguard VOO)

- Assume we invest $10,000 and the S&P 500 returns 9% per year.
- Without expenses the $10,000 grows to $132,677 after 30 years.
- If the fund's expense ratio is 0.05% then we pay $5 in expenses the first year so we only get $10,895 instead of $10,900. That's OK.
- But after 30 years the $10,000 would be worth $130,863 and we would have paid a total of $1,814 in expenses. Ouch!

$$\text{Value} = \text{Invested Amount} \times (1 + \text{Return} - \text{Expense Ratio})^{\text{Years}}$$

$$= \$10{,}000 \times (1 + 9\% - 0.05\%)^{30} \approx \$130{,}863$$

Expense Ratio of 0.10% (SPDR SPY)

- Assume the S&P 500 returns 9% and the expense ratio is 0.10%.
- After 30 years the $10,000 has grown to $129,073.
- Expenses in first year were $10. That’s OK.
- But after 30 years the total expenses would be $3,604!
- Compare this to the total expenses of $1,814 for the VOO fund which only had an expense ratio of 0.05%.
- VOO and SPY are the EXACT same product – why pay more?!?

Expense Ratio of 0.36% (Average of All Funds)

- If we invest $10,000 and the S&P 500 returns 9% per year, then after 30 years we would have $132,677 before expenses.
- According to Morningstar, the average expense ratio is 0.36% for an S&P 500 fund. This means the $10,000 would only have grown to $120,141 and the total expenses over 30 years would be $12,536!
- This under-performed the S&P 500 by almost 9.5% after 30 years!
- This was the average expense ratio – there are even worse funds!
- Why pay so much more for the EXACT same investment product?!?

Conclusion

- Index funds try to match the performance of an index such as the S&P 500.
- You should invest in the fund with lowest commissions and expense ratios.
- This is **VERY** important when investing for many years or decades because the expenses compound and become massive over time.

The book gives more details.