

III PERSONAL CAPITAL

The Real Cost of Fees



III PERSONAL CAPITAL

Table of Contents

3	The Real Cost of Fees
4	The Many Flavors of Fees
5	Executive Summary
6	Findings
6	Advisory Fees
7	Mutual Fund and ETF Fees
7	Total Fees
9	Individual Brokerage Averages
9	Merrill Lynch
10	Ameriprise
11	TD Ameritrade
12	Wells Fargo
13	Morgan Stanley
14	Charles Schwab
15	UBS
16	E*TRADE
17	Fidelity
18	Scottrade
19	USAA
20	Personal Capital Comparison
21	Conclusions
22	Calculation Examples
23	Disclosures

The Real Cost of Fees

Over a lifetime of investing, the total cost of account fees can eat away at a staggering chunk of savings. The seemingly trivial price of fees, compounded over decades, equates to massive losses. When losses associated with fees total into the hundreds of thousands of dollars, the practice of charging high fees, once accepted as a 'cost of investing,' now merits closer scrutiny. Today, the brokerage industry is evolving past the point at which high fees can be easily hidden or justified as a standard industry practice.

One such influence is the Department of Labor (DOL), the federal department responsible for protecting the retirement savings of America's workers. According to the DOL:

"Retirement savings are entitled to protection under the law, but those rules don't apply to every savings plan. With 401(k)s and IRAs, individual investors are more responsible than ever for making important investment decisions, and most don't have the training they need. That means investors are increasingly reliant on the advice they receive. Ideally, your adviser will have your best interest at heart – but that's not always the case." ¹

In early 2015, The White House weighed in on the issue and underscored the importance of strengthening rules to decrease conflicts of interest between investors and brokers who sell financial products. ²

In response to the increased risk to American retirement savings, the DOL proposed a new "conflict of interest" rule that may provide some downward pressure on fees by increasing investor protections related to retirement savings. Currently, it is extremely difficult for

- 1. United States Department of Labor. "Are Your Retirement Savings at Risk?" Retrieved from http://www.dol.gov/featured/protectyoursavings/
- 2. The White House Office of the Press Secretary. (2015, February 23). "FACT SHEET: Middle Class Economics: Strengthening Retirement Security by Cracking Down on Backdoor Payments and Hidden Fees". Retrieved from https://www.whitehouse.gov/the-press-office/2015/02/23/fact-sheet-middle-class-economics-strengthening-retirement-security-crac







investors to know whether a given financial adviser is required by law to act in their best interest when recommending financial products. The "conflict of interest" rule would expand the definition of fiduciary to include brokers, consultants and advisers who market their advice as a "financial expert." The updated rule would impose fiduciary duties that demand more financial advisers act impartially and disclose participation in retirement plans, giving retirement investors a better chance at avoiding investment choices with high fees attached.

The Many Flavors of Fees

Financial institutions charge a variety of fees associated with investment accounts, including account opening fees, service and maintenance fees, as well as trade fees. For the purpose of uncovering the true cost of fees on savings, this report will examine the combined impact of the two primary management fees: advisory fees and fund-related fees.

Advisory fees are typically calculated as a percentage of the assets under management and are charged by a financial adviser to cover the service of advising a client on investment choices, and often cover administrative costs as well.

Fund-related fees, also known as expense ratios, are related directly to the investment fund itself. There are two main categories of funds that include fees. A traditional mutual fund commonly charges high fees that are justified by extensive management activities, such as active pricing and trading of investments, and is advertised as an investment designed to outperform the market. An exchange-traded fund (ETF) is a passive investment with lower fees that cover fund management activities performed more intermittently than an index fund, designed to match, rather than outpace, market performance.

Executive Summary

Financial institutions often downplay the role of fees within an investment by hiding the details in fine print and using generalized language to describe fees. It is important to note that mutual funds regularly embed fees within the fund, obscuring high costs on potential investment returns. For the purpose of this report, Personal Capital examined the data across eleven brokerage firms to expose hidden fees and determine actual savings lost over the lifetime of some of the most widely used financial institutions. The report uncovers what financial institutions actually charge in advisory and funds fees and how those costs impact the earning and return of retirement investments. The methodology Personal Capital used to assess the costs of fees may also be used to understand the impact of fees charged by brokerages not included in this report.

Brokerages examined in this report are listed in order of average total fees from highest to lowest. The brokerage firms represented in this account include those that are tracked by Personal Capital's software, but is not inclusive to all brokerages.

Ameriprise

TD Ameritrade

Charles Schwab

E*TRADE

Fidelity

Merrill Lynch

Morgan Stanley

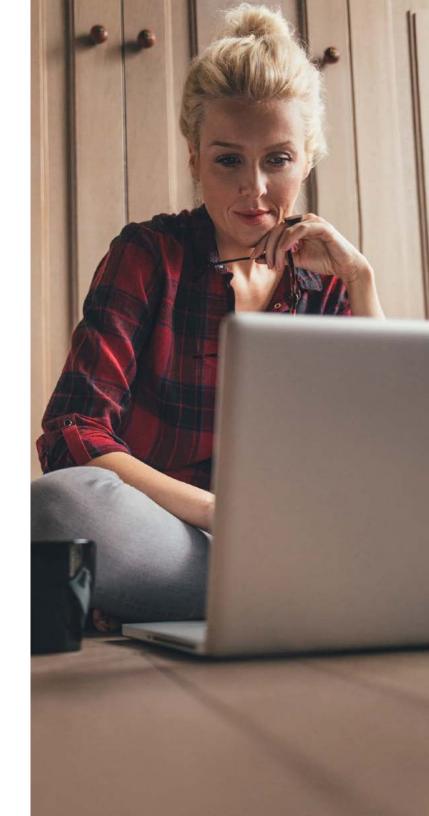
Scottrade

UBS

USAA

Wells Fargo





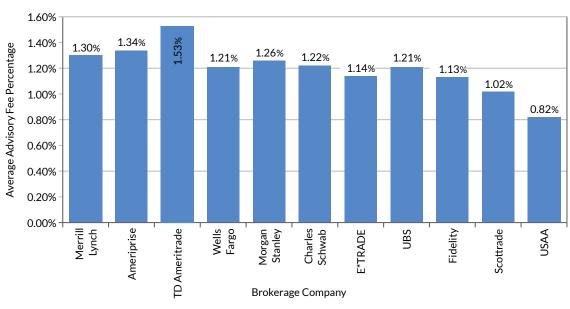


Findings

Advisory Fees

For each financial institution, advisory fee percentages were calculated on the account-level by dividing the total annual advisory fees by the total account balance. Personal Capital found that the average advisory fee percentages range from 0.82% (USAA) to 1.53% (TD Ameritrade).

Average Advisory Fee Percentages by Brokerage Company



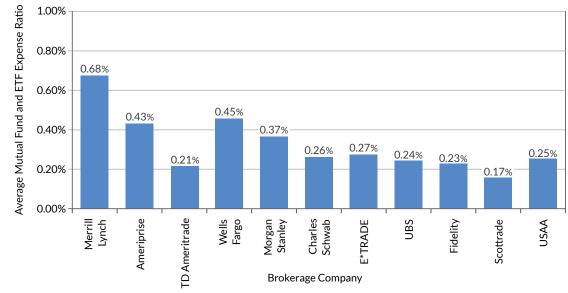
Mutual Fund and FTF Fees

For each financial institution, a mutual fund and ETF fee was calculated by dividing the user's mutual fund and ETF fees by the total account balance (aka un-weighted fund fee). Personal Capital found that the average mutual fund and ETF expense ratios range from 0.17% (Scottrade) to 0.68% (Merrill Lynch).

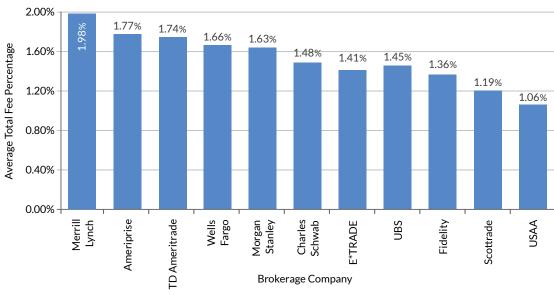
Total Fees

For each financial institution, the average total fee, combining advisory fees and mutual fund/ETF fees, was calculated by adding the average advisory fee percentage to the average mutual fund/ETF expense ratio. Personal Capital found that average total fee percentages range from 1.06% (USAA) to 1.98% (Merrill Lynch).

Average Mutual Fund and ETF Expense Ratios by Brokerage Company



Average Total Fee Percentages by Brokerage Company

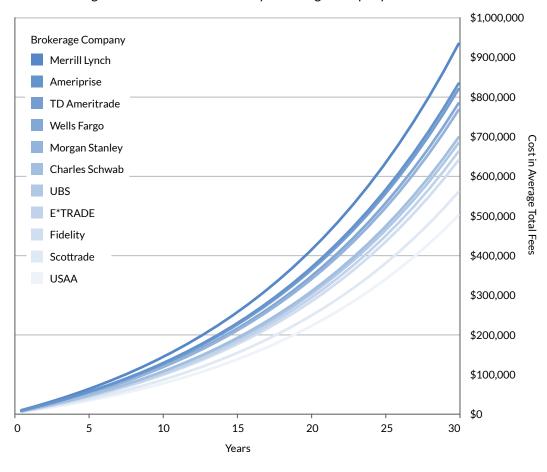




Total Cost of Fees: Nearly \$1 Million Over 30 Years

Applying the range of fees documented in this report to an average account of \$500,000, the costs to a portfolio over 30 years of investing could span from a high of \$936,390 for Merrill Lynch to a low of \$502,407 for USAA.

Cost in Average Total Fees Over 30 Years by Brokerage Company



Cost in Average Total Fees After 30 Years by Brokerage Company





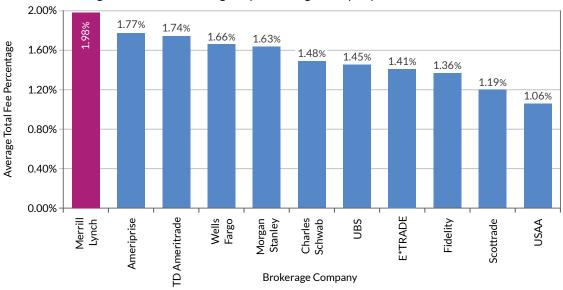
Merrill Lynch

At 1.98%, Merrill Lynch represents the highest average total fee percentage of the eleven brokerages selected. The average advisory fee percentage is 1.30% and the average mutual fund and ETF expense ratio is 0.68%. Merrill Lynch average total fees would cost a \$500,000 portfolio holder \$936,390 over 30 years.

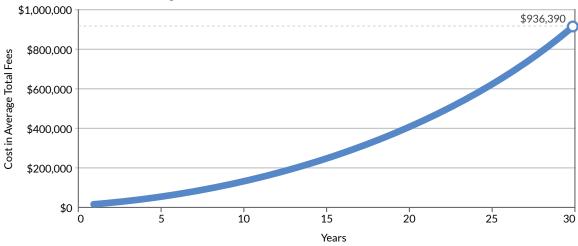
Merrill Lynch Average Fee Breakdown

Average Advisory Fee Percentage	1.30%
Average Mutual Fund and ETF Expense Ratio	0.68%
Average Total Fee Percentage	1.98%
Average Total Fees after 30 Years	\$936,390





Cost in Average Total Fees Over 30 Years





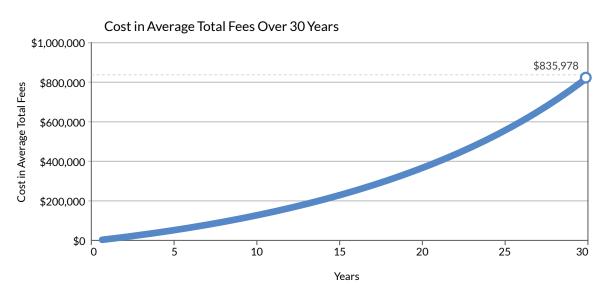
Ameriprise

With Ameriprise, the average total fee percentage is 1.77%. The average advisory fee percentage is 1.34% and the average mutual fund and ETF expense ratio is 0.43%. Ameriprise average total fees would cost a \$500,000 portfolio holder \$835,978 over 30 years.

Ameriprise Average Fee Breakdown

Average Advisory Fee Percentage	1.34%
Average Mutual Fund and ETF Expense Ratio	0.43%
Average Total Fee Percentage	1.77%
Average Total Fees after 30 Years	\$835,978

Average Total Fee Percentages by Brokerage Company 2.00% 1.77% 1.74% 1.66% 1.63% Average Total Fee Percentage 1.60% 1.48% 1.45% 1.41% 1.36% 1.19% 1.20% 1.06% 0.80% 0.40% 0.00% E*TRADE Morgan Stanley Charles Schwab Fidelity Scottrade Ameriprise TD Ameritrade Wells Fargo UBS USAA **Brokerage Company**





TD Ameritrade

With TD Ameritrade, the average total fee percentage is 1.74%. The average advisory fee percentage is 1.53% and the average mutual fund and ETF expense ratio is 0.21%. TD Ameritrade average total fees would cost a \$500,000 portfolio holder \$821,809 over 30 years.

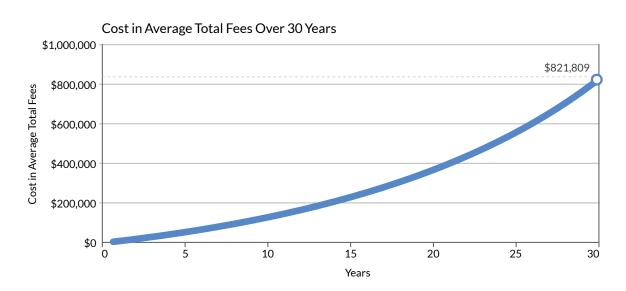
TD Ameritrade Average Fee Breakdown

Average Advisory Fee Percentage	1.53%
Average Mutual Fund and ETF Expense Ratio	0.21%
Average Total Fee Percentage	1.74%
Average Total Fees after 30 Years	\$821,809

2.00% 1.77% 1.74% 1.66% 1.63% Average Total Fee Percentage 1.60% 1.48% 1.45% 1.41% 1.36% 1.19% 1.20% 1.06% 0.80% 0.40% 0.00% E*TRADE Morgan Stanley Charles Schwab Fidelity Scottrade Ameriprise TD Ameritrade Wells Fargo UBS

Brokerage Company

Average Total Fee Percentages by Brokerage Company





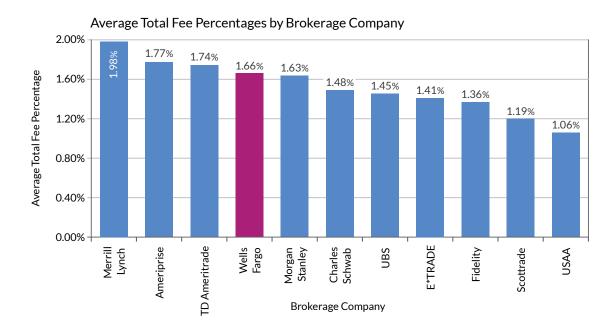
Wells Fargo

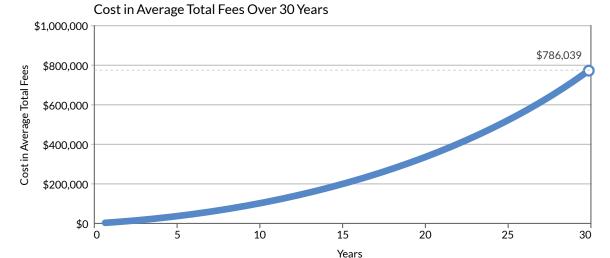
With Wells Fargo, the average total fee percentage is 1.66%. The average advisory fee percentage is 1.21% and the average mutual fund and ETF expense ratio is 0.45%. Wells Fargo average total fees would cost a \$500,000 portfolio holder

\$786,039 over 30 years.

Wells Fargo Average Fee Breakdown

Average Advisory Fee Percentage	1.53%
Average Mutual Fund and ETF Expense Ratio	0.45%
Average Total Fee Percentage	1.66%
Average Total Fees after 30 Years	\$786,039





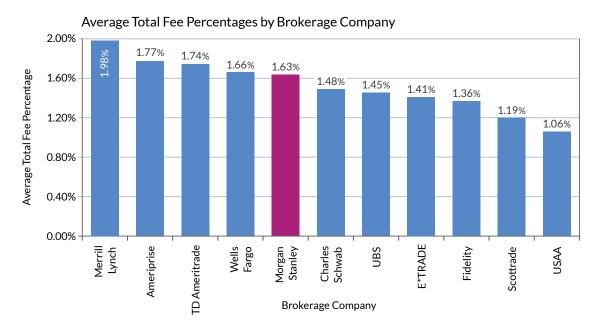


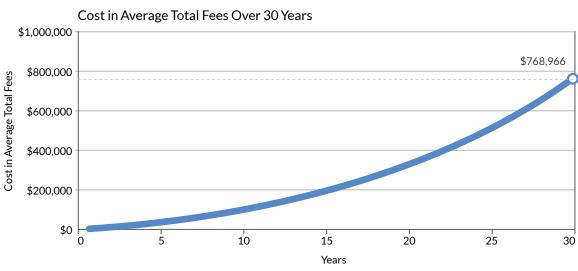
Morgan Stanley

With Morgan Stanley, the average total fee percentage is 1.63%. The average advisory fee percentage is 1.26% and the average mutual fund and ETF expense ratio is 0.37%. Morgan Stanley average total fees would cost a \$500,000 portfolio holder \$768,966 over 30 years.

Morgan Stanley Average Fee Breakdown

Average Advisory Fee Percentage	1.26%
Average Mutual Fund and ETF Expense Ratio	0.37%
Average Total Fee Percentage	1.63%
Average Total Fees after 30 Years	\$768,966







Charles Schwab

With Charles Schwab, the average total fee percentage is 1.48%. The average advisory fee percentage is 1.22% and the average mutual fund and ETF expense ratio is 0.26%. Charles Schwab average total fees would cost a \$500,000 portfolio holder \$699,756 over 30 years.*

Charles Schwab Average Fee Breakdown

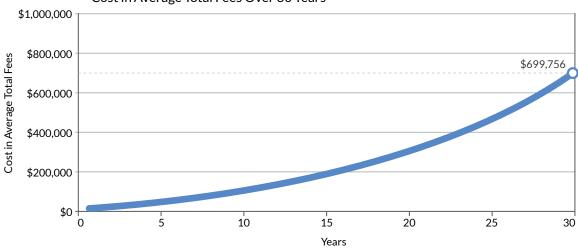
Average Advisory Fee Percentage	1.22%
Average Mutual Fund and ETF Expense Ratio	0.26%
Average Total Fee Percentage	1.48%
Average Total Fees after 30 Years	\$699,756

^{*} Charles Schwab calculations are taken from accounts that are charged fees. Not all accounts are charged fees.

Average Total Fee Percentages by Brokerage Company 2.00% 1.77% 1.74% 1.66% 1.63% Average Total Fee Percentage 1.60% 1.48% 1.45% 1.41% 1.36% 1.19% 1.20% 1.06% 0.80% 0.40% 0.00% E*TRADE Charles Schwab Fidelity TD Ameritrade Wells Fargo Morgan Stanley UBS Ameriprise Scottrade USAA

Brokerage Company







Individual Brokerage Averages

UBS

With UBS, the average total fee percentage is 1.45%. The average advisory fee percentage is 1.21% and the average mutual fund and ETF expense ratio is 0.24%. UBS average total fees would cost a \$500,000 portfolio holder \$685,422 over 30 years.

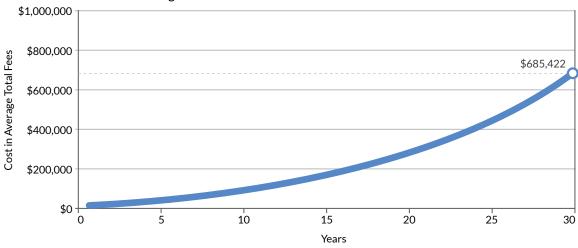
UBS Average Fee Breakdown

Average Advisory Fee Percentage	1.21%
Average Mutual Fund and ETF Expense Ratio	0.24%
Average Total Fee Percentage	1.45%
Average Total Fees after 30 Years	\$685,422

Average Total Fee Percentages by Brokerage Company 2.00% 1.77% 1.74% 1.66% 1.63% Average Total Fee Percentage 1.60% 1.48% 1.45% 1.41% 1.36% 1.19% 1.20% 1.06% 0.80% 0.40% 0.00% E*TRADE Scottrade Morgan Stanley Charles Schwab Fidelity Ameriprise TD Ameritrade Wells Fargo UBS USAA

Brokerage Company

Cost in Average Total Fees Over 30 Years





E*TRADE

With E*TRADE, the average total fee percentage is 1.41%. The average advisory fee percentage is 1.14% and the average mutual fund and ETF expense ratio is 0.27%. E*TRADE average total fees would cost a \$500,000 portfolio holder \$663,826 over 30 years.*

E*TRADE Average Fee Breakdown

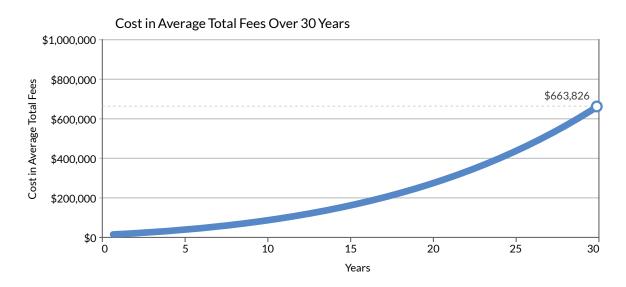
Average Advisory Fee Percentage	1.14%
Average Mutual Fund and ETF Expense Ratio	0.27%
Average Total Fee Percentage	1.41%
Average Total Fees after 30 Years	\$663,826

^{*} E*TRADE calculations are taken from accounts that are charged fees. Not all accounts are charged fees.

2.00% 1.77% 1.74% 1.66% 1.63% Average Total Fee Percentage 1.60% 1.48% 1.45% 1.41% 1.36% 1.19% 1.20% 1.06% 0.80% 0.40% 0.00% E*TRADE Charles Schwab Fidelity Scottrade Ameriprise TD Ameritrade Wells Fargo Morgan Stanley UBS USAA

Brokerage Company

Average Total Fee Percentages by Brokerage Company





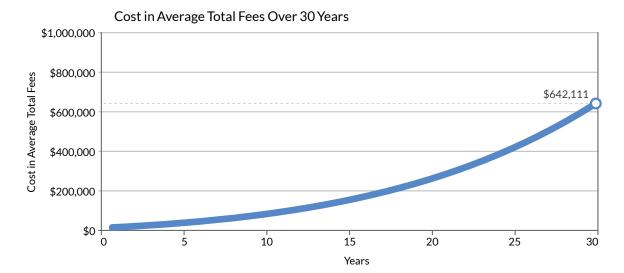
Fidelity

With Fidelity, the average total fee percentage is 1.36%. The average advisory fee percentage is 1.13% and the average mutual fund and ETF expense ratio is 0.23%. Fidelity average total fees would cost a \$500,000 portfolio holder \$642,111 over 30 years.

Fidelity Average Fee Breakdown

Average Advisory Fee Percentage	1.13%
Average Mutual Fund and ETF Expense Ratio	0.23%
Average Total Fee Percentage	1.36%
Average Total Fees after 30 Years	\$642,111

Average Total Fee Percentages by Brokerage Company 2.00% 1.77% 1.74% 1.66% 1.63% Average Total Fee Percentage 1.60% 1.48% 1.45% 1.41% 1.36% 1.19% 1.20% 1.06% 0.80% 0.40% 0.00% E*TRADE Scottrade Morgan Stanley Charles Schwab Fidelity Ameriprise TD Ameritrade Wells Fargo UBS USAA **Brokerage Company**





Scottrade

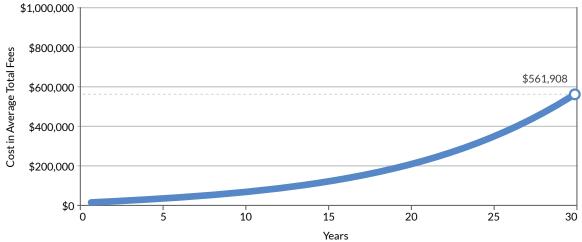
With Scottrade, the average total fee percentage is 1.19%. The average advisory fee percentage is 1.02% and the average mutual fund and ETF expense ratio is 0.17%. Scottrade average total fees would cost a \$500,000 portfolio holder \$561,908 over 30 years.

Scottrade Average Fee Breakdown

Average Advisory Fee Percentage	1.02%
Average Mutual Fund and ETF Expense Ratio	0.17%
Average Total Fee Percentage	1.19%
Average Total Fees after 30 Years	\$561,908

Average Total Fee Percentages by Brokerage Company 2.00% 1.77% 1.74% 1.66% 1.63% Average Total Fee Percentage 1.60% 1.48% 1.45% 1.41% 1.36% 1.19% 1.20% 1.06% 0.80% 0.40% 0.00% E*TRADE Scottrade Morgan Stanley Charles Schwab Fidelity Ameriprise TD Ameritrade Wells Fargo UBS USAA **Brokerage Company**







Individual Brokerage Averages

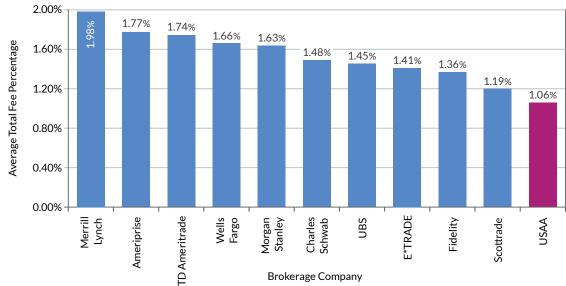
USAA

With USAA, the average total fee percentage is 1.06%. The average advisory fee percentage is 0.82% and the average mutual fund and ETF expense ratio is 0.25%. USAA average total fees would cost a \$500,000 portfolio holder \$502,407 over 30 years.

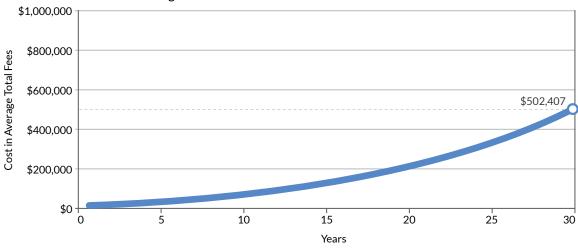
USAA Average Fee Breakdown

Average Advisory Fee Percentage	0.82%
Average Mutual Fund and ETF Expense Ratio	0.25%
Average Total Fee Percentage	1.06%
Average Total Fees after 30 Years	\$502,407

Average Total Fee Percentages by Brokerage Company



Cost in Average Total Fees Over 30 Years





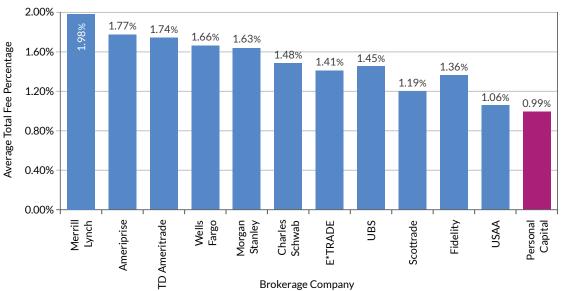
Personal Capital Comparison

Personal Capital offers a total fee percentage lower than any other in the dataset of the eleven selected brokerages, at 0.99%. The Personal Capital mutual fund and ETF expense ratio is 0.10%, and the average Personal Capital advisory fee percentage is 0.89%. Personal Capital average total fees would cost a \$500,000 portfolio holder \$467,581 over 30 years. Additionally, Personal Capital charges no account opening fees, no service or maintenance, and no trade fees. The highest advisory fee Personal Capital currently charges clients is 0.89%.

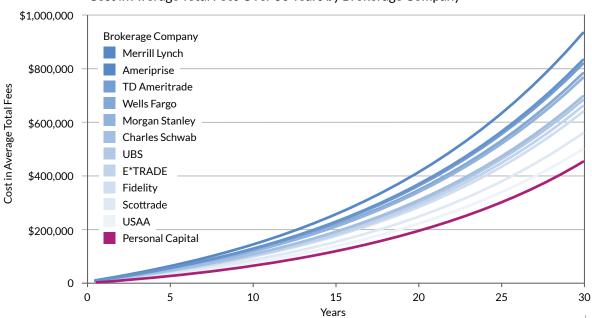
Personal Capital Average Fee Breakdown

Average Advisory Fee Percentage	0.89%
Average Mutual Fund and ETF Expense Ratio	0.10%
Average Total Fee Percentage	0.99%
Average Total Fees after 30 Years	\$467,581

Average Total Fee Percentages by Brokerage Company



Cost in Average Total Fees Over 30 Years by Brokerage Company





Conclusions

Based on the findings in this report, there is a wide range in the cost of fees associated with investment accounts, yet even the lowest average cost represents hundreds of thousands of dollars in lost savings. The results show that fees based on a fraction of a percentage that may seem trivial at the outset, balloon to enormous proportions over the life of a long-term investment. If the capital currently lost to fees remained invested in retirement, savings could increase by an equally significant amount.

At 1.98% in average total fee percentage, Merrill Lynch had the highest overall average total fee percentage of the eleven selected brokerages, representing the worst offender in costs related to fees on retirement savings investments.

At 1.06% in average total fee percentage, USAA had the lowest overall average total fee percentage of the eleven selected brokerages, coming in higher than the average total fee charged by Personal Capital at 0.99%.







Calculation Examples

To uncover fees associated with investments, Personal Capital employed machine learning and human training to calculate both the average advisory fee for managed accounts and average fund related fees. Personal Capital created a dataset for each financial institution and analyzed a total of 9,365 advised accounts and 146,559 accounts with fund related fees across the 11 financial institutions. Data from the 3rd Quarter of 2014 were used to examine the range of each fee type and calculate the average total fee of each financial institution and the data include a 10% trim to remove outliers. The 30-year projected fee metric is based on an account annual growth rate of 7% and average total fees remaining consistent to the derived rates over the 30-year period.

Advisory Fee Calculation Example:

Total Portfolio = \$100,000 Annual Advisory Fee = \$1,500 Advisory Fee % (\$1,500 / \$100,000 = 1.5%) = 1.5%

Mutual Fund/ETF Fee Calculation Example:

Total Portfolio = \$100,000 Annual Mutual Fund/ETF Fee = \$1,000 Expense Ratio (unweighted) (\$1,000 / \$100,000 = 1.0%) = 1.0%

Total Fee Calculation Example:

Total Portfolio = \$100,000 Total Fee (Advisor + Fund) = \$2,500 Total Fee % (\$2,500 / \$100,000 = 1.0%) = 2.5%

Disclosures

This communication and all data are for informational purposes only and do not constitute a recommendation to buy or sell securities. You should not rely on this information as the primary basis of your investment, financial, or tax planning decisions. You should consult your legal or tax professional regarding your specific situation. Third party data is obtained from sources believed to be reliable. However, PCAC cannot guarantee that data's currency, accuracy, timeliness, completeness or fitness for any particular purpose. Certain sections of this commentary may contain forward-looking statements that are based on our reasonable expectations, estimate, projections and assumptions. Forward-looking statements are not guarantees of future performance and involve certain risks and uncertainties, which are difficult to predict. Past performance is not a guarantee of future return, nor is it necessarily indicative of future performance. Keep in mind investing involves risk. The value of your investment will fluctuate over time and you may gain or lose money.