

The Math of After-Tax Returns



Knowing how much of a bite taxes are taking out of your investment returns may help you better see if you are on track with your investment goals, and determine if tax strategies can help.

Calculating After-Tax Returns

$$\frac{[(\text{Ending market value} - \text{tax paid}) (\text{beginning market value})]}{(\text{beginning market value})} = \text{After-tax return}$$

A Look at a Typical Portfolio

Let's look at the after-tax returns for hypothetical investors Terry and Pam, who have a combined income of \$375,000 a year and invest in an equity mutual fund. The fund's dividend yield was 1.8% and had 10% in capital gains distributions before the end of the year.

Terry & Pam's Mutual Fund Returns

Mutual fund beginning value	\$694,444
Mutual fund ending market value	\$750,000
Pretax market return	8%

Taxable distributions:

10% mutual fund capital gains distributions for the year	\$75,000
1.8% dividend yield	\$12,500
Total taxable distributions (capital gains distribution + dividends)	\$87,500

Tax rate:

Long-term capital gains federal tax rate	15%
Net investment income tax applies	3.8%
	18.8%

Federal tax due (18.8% x \$87,500) \$16,450

Ending market value (net of tax paid) \$733,550

After-tax return = (\$733,550 - \$694,444) / \$694,444 **5.63%**

Source: American Century Investments. Assumes capital gains distributions are reinvested and dividends are qualified. This hypothetical situation contains assumptions that are intended for illustrative purposes only and are not representative of the performance of any security. There is no assurance similar results can be achieved, and this information should not be relied upon as a specific recommendation to buy or sell securities.

The pre-tax market return of 8% fell to an after-tax return of 5.63% for Terry and Pam—given their tax rates and that they held this mutual fund in a taxable brokerage account. Taxes decreased the market return by 2.37%.

Knowing the after-tax return, Terry and Pam may now question if this is the best investment to hit their financial goals.

The Difference of a Tax-Aware Portfolio

Now let's review Terry and Pam's portfolio versus one invested by tax-aware Clark and Maria. Both families earn a household income of \$375,000 and have 75% equity/25% bond investment portfolios totaling \$1,000,000. (According to the current income tax rates, this income places Terry and Pam in the 32% marginal tax bracket.)

Terry and Pam – Typical Portfolio	\$1,000,000 Portfolio		
	Income	Tax Rate*	Taxes
Investments:			
Equity Mutual Fund			
\$750,000 year-end balance			
1.8% dividend yield of \$694,444 beginning balance (all qualified dividends)	\$12,500	18.8%	\$2,350
10% capital gains distribution (all long-term and reinvested in fund)	\$75,000	18.8%	\$14,100
Bond Mutual Fund			
\$250,000 year-end balance			
1.5% yield of \$250,000 beginning balance	\$3,750	35.5%	\$1,331.25
Total Taxes			\$17,781.25
% lost to taxes			-1.78%

Clark and Maria – Tax-Aware Portfolio	\$1,000,000 Portfolio		
	Income	Tax Rate*	Taxes
Investments:			
Tax-Managed Equity Mutual Fund			
\$750,000 year-end balance			
0.13% yield	\$975	18.8%	\$183.30
No capital gains distribution		18.8%	\$0
Municipal Bond Mutual Fund			
\$250,000 year-end balance			
0.9% yield not taxed at the federal level	\$2,250	0%	\$0
Total Taxes			\$183.30
% lost to taxes			-0.02%

*Marginal income tax rate + net investment income tax (NIIT) 3.8%.

Long-term capital gain and qualified dividend tax rate + NIIT 3.8%.

NIIT applies because combined income is greater than \$250,000.

Although the two couples have the same stock/bond investment mix, they have starkly different tax costs for the year. Terry and Pam must pay \$17,781 in taxes, reducing their \$1,000,000 portfolio to \$982,218 (-1.78%). As for Clark and Maria, their tax bill will only be \$183, leaving them with an after-tax portfolio of \$999,817.

Hypothetical After-Tax Portfolios



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The Outcome

While these scenarios are for hypothetical investors, you can still see the impact of a tax-aware strategy. When you know the impact of taxes on your investments, you can explore various tax strategies to see if you can keep more of your returns.

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