



Growing and Protecting Your Net Worth

EXAMPLES OF WHY REDUCING VOLATILITY MATTERS

Example #1: High Avg. Return and High Volatility.

A 25% average return is really nice, but high volatility means the gains are consumed by recovering from losses and no real net growth occurs over this time period.

Time Period	Annual Return	Portfolio Value
Start		\$100,000
Year 1	+100%	\$200,000
Year 2	-50%	\$100,000
Year 3	+100%	\$200,000
Year 4	-50%	\$100,000
	Avg. Return = $+100/4 = 25\%$	Net Gain = \$0.

Example #2: Half the Return and Half the Volatility.

If we divide the annual returns in Example #1 by 2, volatility is cut in half, and so is the average annual return for this time period. This portfolio, however, experiences a much larger net gain than Example #1, because there is less loss to make up for.

Time Period	Annual Return	Portfolio Value
Start		\$100,000
Year 1	+50%	\$150,000
Year 2	-25%	\$112,500
Year 3	+50%	\$168,750
Year 4	-25%	\$126,562
	Avg. Return = $+50/4 = 12.5\%$	Net Gain = \$26,562 = 26.5%

Example #3: Low Avg. Return and Low Volatility.

Volatility is very low in this example. Because there is little or no loss to overcome, a lower annual return can create a portfolio gain similar to Example #2.

Time Period	Annual Return	Portfolio Value
Start		\$100,000
Year 1	+6%	\$106,000
Year 2	+6%	\$112,360
Year 3	+6%	\$119,102
Year 4	+6%	\$126,248
	Avg. Return = $+24/4\% = 6\%$	Net Gain = \$26,248 = 26.2%