

## STABILITY IN ANNUAL INVESTMENT RETURNS

**Stability of Returns** The paramount goal when designing a portfolio is to maximize the value a portfolio will achieve over a period of years. Two of the most effective methods of accomplishing this goal are to:

- 1) Minimize years with negative investment returns, and
- 2) Avoid years with wide swings in investment returns.

Compare, for example, two portfolios: **A** and **B**. Assume that **Portfolio A** is a well-diversified portfolio that has an average investment return of 5% per year.

**Portfolio B** is a portfolio that is not as well diversified (meaning: annual returns vary quite a bit from year to year), but still produces the same average 5% return.

This annual return variation above and below the average return for a portfolio is known as **Standard Deviation (SD)**. In the case of **Portfolio A**, the **SD = 5%** (the return varies plus or minus 5% from the average).

In the case of **Portfolio B**, let's set the **SD = 15%** (plus or minus 15% from the average). Let's assume that this portfolio only contains stocks of large U.S. companies. [Note: the **15% SD** approximates that of the S&P 500 Index over the 20-year period 1987 – 2006.]

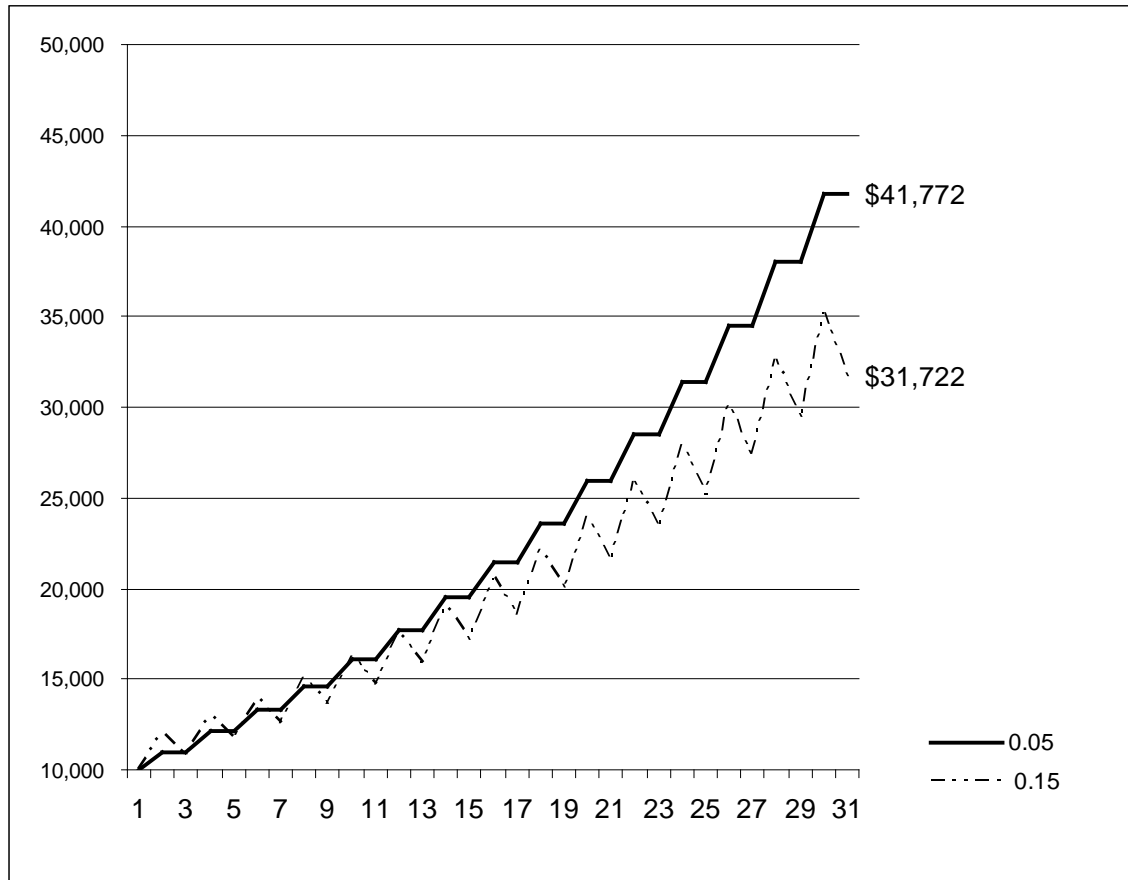
In this example, here are the annual returns for the two portfolios over a 10 year period:

	<b>Portfolio A</b>	<b>Portfolio B</b>
<b>Year</b>		
1	10%	20%
2	0%	-10%
3	10%	20%
4	0%	-10%
5	10%	20%
6	0%	-10%
7	10%	20%
8	0%	-10%
9	10%	20%
10	0%	-10%

The average arithmetic return for both portfolios averaged 5%, but Portfolio B experienced greater volatility.

If \$10,000 were invested in each portfolio, the chart below identifies how that \$10,000 would fare over a 30-year period.

Portfolio A is the solid line, and Portfolio B is the dashed line.



In the early years, there is not much difference between the values of the two portfolios. As can be seen, however, **Portfolio A** ends up with a substantially higher value in the long run. In this example, the difference is about **30% more** after 30 years.

Hence, an investment portfolio that has both avoids years of negative investment returns and experiences less volatility above and below its average annual investment return, year after year, can produce significantly more wealth over time than one with greater volatility.