



The Magic of Compounding

Compounding investment earnings is what can make even small investments become large investments given enough time.

How it works

The money you save (either in a savings account, a mutual funds or in individual stocks) earns interest. Then you earn interest on the money you originally save, plus on the interest you've accumulated. As your savings grow, you earn interest on a bigger and bigger pool of money.

For example, the value of \$1000 compounded at various rates of return over time is shown in the following chart.

Years	4%	6%	8%	10%
10	\$1,481	\$1,791	\$2,159	\$2,994
20	\$2,191	\$3,207	\$4,661	\$6,728
30	\$3,243	\$5,743	\$10,063	\$17,449

Start saving early

For every 10 years you delay before starting to save for retirement, you will need to save three times as much each month to catch up.

Starting at age 20

If you put \$1,000 a year into a 401k (with no match) every year from age 20 through age 30 (for 11 years) and stop - and the account earns seven percent annually - your savings will equal \$168,514 at age 65. It will be even greater if your contributions are match by your employer.

Starting at age 30

If you don't start until age 30, but save the same \$1,000 amount annually but for 35 years straight at the same seven percent rate, you will have saved three times as much money but your account will grow to only \$147,913 at age 65.