Financial Literacy Series

Taking Control of Your Financial Future

The Power of Compounding

When you begin to save is as important as how much you save. Compounding is the rate your account balance grows over time as a result of your earnings being reinvested into your account and left to accumulate. Your savings can grow even faster by starting to invest at an earlier age.

The Rule of 72

Albert Einstein created a fairly accurate mathematical formula for calculating how long it will take to double an investment based on the interest earned each year. That formula is commonly called the rule of 72. While it isn't exact, it's very close and can be a pretty accurate rule of thumb for quickly calculating how long it will take to double your money, based on its rate of return. Divide 72 by your investment rate of return and you'll get the number of years it'll take for your money to double. Take a look at Exhibit A to see how savings can compound over time.

Age	4%	Age	8%	Age	12%
Money Doubles Every 18 Years		Money Doubles Every 9 Years		Money Doubles Every 6 Years	
29	\$10,000	29	\$10,000	29	\$10,000
47	\$20,000	38	\$20,000	35	\$20,000
65	\$40,000	47	\$40,000	41	\$40,000
		56	\$80,000	47	\$80,000
		65	\$160,000	53	\$160,000
				59	\$320,000
				65	\$640,000

Total Retirement Savings Comparison

Brittney Joshua \$1,000/month \$1,000/month Starts at age 25 \$3,034,281 Growth \$1,140,295 Growth



Exhibit A

Starting Early is Important

Exhibit B

Exhibit B on the right shows how starting early can make a big difference over time. In this example, Brittney begins to contribute at age 25 with monthly deposits of \$1,000. Josh waits for 10 years and begins at age 35 with the same amount saved each month. Assuming a hypothetical rate of return of 8%, Brittney ends up at retirement with over \$3.5 million while Josh's balance is just over \$1.5 million.

So when it comes to planning for eventual financial freedom, remember that how much you put away per month is important but, just as important is how much time you can invest in your plan. In other words, the sooner you start, the greater the advantage you'll have.

Wealth Management 401(k) Retirement Plans College Planning Trust and Estates Investment Management

