What is Inflation's Impact on Savings?

Worksheet

Inflation erodes the real value of savings by decreasing purchasing power. If inflation exceeds your savings rate of return, your money buys less in the future than it does today.

Questions

1. You have $2,000 in savings earning 1% per year. If inflation is 2%, what is your real return?
A) 3%
B) −1%
C) 1%
D) 2%

2. Which scenario best protects against inflation?
A) Savings account earning 0.5%, inflation 2%
B) Stock fund earning 7%, inflation 3%
C) Money market at 1%, inflation 1.5%
D) CD earning 2%, inflation 4%

3. If nominal savings are $5,000 and inflation has reduced real value by 15%, what is the real value?
A) $4,250
B) $5,750
C) $3,500
D) $4,800

4. Over 10 years at 3% annual inflation, $1,000 today is worth approximately:
A) $1,344
B) $744
C) $1,300
D) $700

5. You save $1,000 with a 2% annual interest rate. Inflation is 3% per year. What is your real return after 1 year?

6. If inflation averages 4% yearly, how much purchasing power do $5,000 in savings lose over 5 years?

7. Your savings earn 5% per year; inflation is 2%. What is your real rate of return?

8. Define: What does inflation do to savings?

9. Define: How do you calculate real return?

10. Define: Why is inflation a threat to savings?

Answer Key

1. B) −1% — Real return = 1% − 2% = −1%. You're losing purchasing power.

2. B) Stock fund earning 7%, inflation 3% — 7% − 3% = 4% real return, the highest real gain among options.

3. A) $4,250 — 5,000 × (1 − 0.15) =5,000 × 0.85 = $4,250.

4. B) $744 — 1,000 ÷ $(1.03)^{10}$ ≈1,000 ÷ 1.344 ≈ $744 in today's purchasing power.

5. Nominal return: 1,000 × 1.02 =1,020 Real return accounts for inflation: 2% − 3% = −1% Real value: 1,020 × (1 − 0.03) =990 You've lost $10 in purchasing power.

6. Real value after 5 years: 5,000 ÷ $(1.04)^5$ =5,000 ÷ 1.217 ≈ 4,107 Purchasing power loss:5,000 − 4,107 =893 Approx 17.9% loss of purchasing power

7. Real return = Nominal return − Inflation rate Real return = 5% − 2% = 3% Your money is gaining 3% in purchasing power annually.

8. Inflation reduces the purchasing power of money, meaning your savings buy less in the future.

9. Real Return = Nominal Return − Inflation Rate. Example: 5% return − 3% inflation = 2% real return.

10. If your savings rate of return is lower than inflation, you're losing purchasing power even though your account balance stays the same.