

9.9 The Real Interest Rate

Monday, November 2, 2020

3:28 PM

Inflation and the time value of money

Invest \$1 at $i\%$, inflation is $m\%$

$1+i$ at year 1 $\rightarrow 1+i/1+m = \text{Purchasing Power}$

$1+r = 1+i/1+m \rightarrow r = \text{real interest rate}$

$r = 1+i/1+m - 1 = i-m/1+m$ if m is small, $r \approx i-m$

$m = 1.8$ $i = 3.4 \rightarrow r \approx .6$ or $r = 1.034/1.018 - 1 = 1.57$