HW5 solutions

The real interest rate is the difference between the nominal interest rate and the inflation rate. The nominal interest rate is 11 percent, but we need to solve for the inflation rate. We do this with the quantity equation expressed in percentage-change form:

% Change in $M$ + % Change in $V$ = % Change in $P$ + % Change in $Y$.

Rearranging this equation tells us that the inflation rate is given by:

% Change in $P$ = % Change in $M$ + % Change in $V$ - % Change in $Y$.

Substituting the numbers given in the problem, we thus find:

% Change in $P$ = 14% + 0% - 5%

= 9%.

Thus, the real interest rate is 2 percent: the nominal interest rate of 11 percent minus the inflation rate of 9 percent.