EC 201: Principles of Macroeconomics

In class exercise: Savings and Investment-part 2

Fall 2021

Q1. Let's analyze the likely effect of a government expenditure on the interest rate. Congress estimated that the cost of increasing support and expanding pre-kindergarten education and infant and toddler childcare would cost $28 billion in 2014. Since the U.S. government was running a budget deficit at the time, assume that the new pre-K funding was financed by government borrowing, which increases the demand for loanable funds without affecting supply.

- Draw typical demand (D_1) and supply (S_1) curves for loanable funds without the cost of the expanded pre-K programs accounted for. Label the vertical axis "Interest rate" and the horizontal axis "Quantity of loanable funds." Label the equilibrium point (E_1) and the equilibrium interest rate (r_1).

- Now draw a new diagram with the cost of the expanded pre-K programs included in the analysis. Shift the demand curve in the appropriate direction. Label the new equilibrium point (E_2) and the new equilibrium interest rate (r_2).

- How does the equilibrium interest rate change in response to government expenditure on the expanded pre-K programs? Explain.

Q2. Suppose Manchester City Soccer Club unexpectedly announces that due to an accounting error, it must amend last year's accounting statement and reduce last year's reported profit by $5 million. It also announces that this change has no implications for future profits. Will this affect Manchester City's stock price? Why or why not?

Q3. Application of Present Value. Suppose you borrowed $10,000 from your dad today. One year from now, you will have to return the $10,000 to him. If the annual interest rate is 5%, how much money do you need today to ensure that you will have $10,000 one year from today?