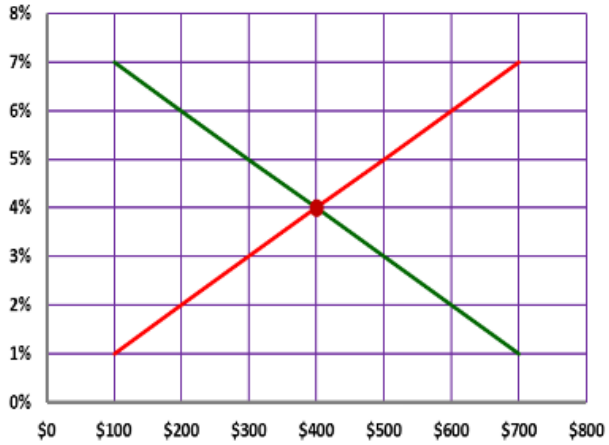
Fisher Effect

According to the Fisher effect, if expected inflation increases by x percentage points, then the (nominal) equilibrium interest rate (r) will also increase by x percentage points.

Example: The graph below represents the current equilibrium in the loanable funds market. Suppose both borrowers and lenders of loanable funds expect inflation to increase by 1 percentage point. What will be the new equilibrium interest rate?



We could try shifting curves to answer the question. π^e affects both the supply and the demand of loanable funds. If a lender expects higher inflation in the future, he/she will be less inclined to lend. This creates an inward shift of the S^{LF} curve. Borrowers, however, will want to borrow more if they expect inflation to be higher in the future. This will shift the D^{LF} curve outward. These shifts would each increase the equilibrium interest rate, but we don't know by how much. We need a different method to answer this question.

The very presence of π^e in our discussion implies that we actually care about real purchasing power, not nominal dollar amounts. Let's say that inflation is currently 3%. That means that a real interest rate of (nominal interest rate - π) 1% is needed to clear the loanable funds market. If inflation is expected to increase by one percentage point, then an equal increase in the (nominal) equilibrium interest rate would leave the real interest rate unchanged and the loanable funds market would once again be in equilibrium. Therefore, the new (nominal) equilibrium interest rate is (original nominal interest rate + increase in π^e = 4% + 1%) 5%. **This is the Fisher Effect: if π^e increases by 1%, then the equilibrium interest rate should also increase by 1%.**