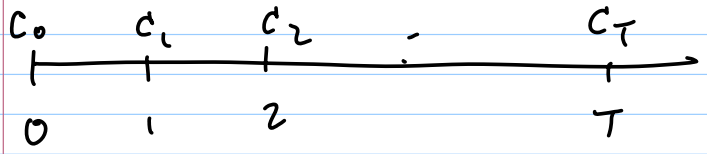
Econ 422 Lec 10

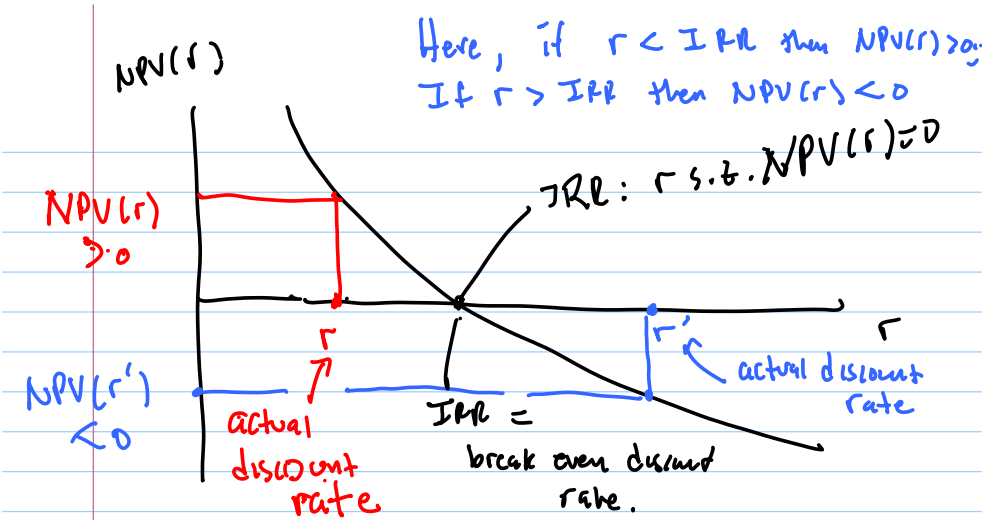
Note Title 8/4/2010

IRR

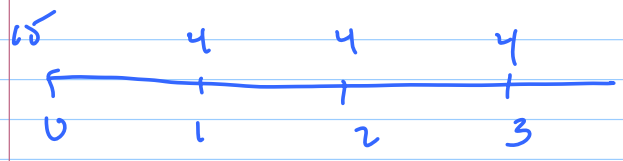


IRR is the discount rate s.t.

$$NPV(r) = C_0 + \frac{C_1}{1+r} + \frac{C_2}{(1+r)^2} + \dots \frac{C_T}{(1+r)^T} = 0$$



Equivalent cost



PV = 25.69

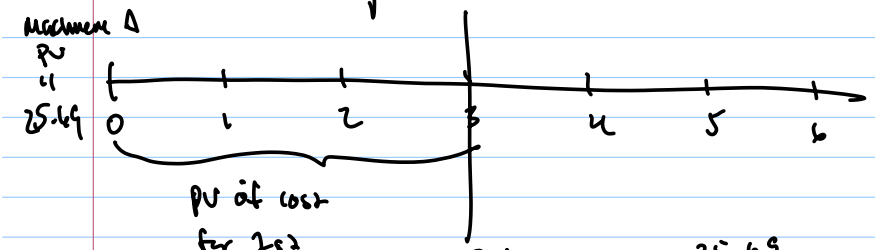
C = annual rental cost

$PV = 25.69 = C * PVA(0.06, 3)$

$$C = \frac{25.69}{PVA(0.06, 3)}$$

$$PV = 25.69 + \frac{25.69}{(1.06)^3}$$

Common life span



PV of cost for 2nd machine = 25.69

PV in year 3 = 25.69 ↓ replacement

$$PV_0 = \frac{25.69}{(1.06)^3}$$