Minimum Wage: Example

Suppose there exist two cities: A & B
City A has a monopsony while City B is perfectly Competitive

City A

Demand: $W_D^A = 25 - 5 \cdot L_D^A$

Supply: $W_S^A = 3 + 3 \cdot L_S^A$

MC: $MC_L = 3 + 6L_S^A$

City B

Demand: $W_D^B = 25 - L_D^B$

$W_S^B = 2 + 3L_S^B$

(i) Solve for EQ in City A for both Monopsony + CE

CE: $25 - 5L = 3 + 3L$

$22 = 8L$

$L_A^* = \frac{11}{4} \Rightarrow W_A^* = 3 + 3\left(\frac{11}{4}\right)$

$W_A^* = 11.25$

(11.25, 2.75)

Monopsony: $25 - 5L = 3 + 6L$

$22 = 11L$

$L_A^* = 2 \Rightarrow W_A^* = 3 + 3(2)$

$= 9$

(9, 2)

(ii) Solve for π for city A for Monopsony + Comp EQ & compare. Assume $TR = 100$ & $n.k = 15$

$\pi_m = 100 - (2)(9) - 15$

$= 100 - 18 - 15 = 67$

$\pi_{CE} = 100 - (2.75)(11.25) - 15$

≈ 54

$\pi_m > \pi_{CE}$

(III) Solve for E2 for City B

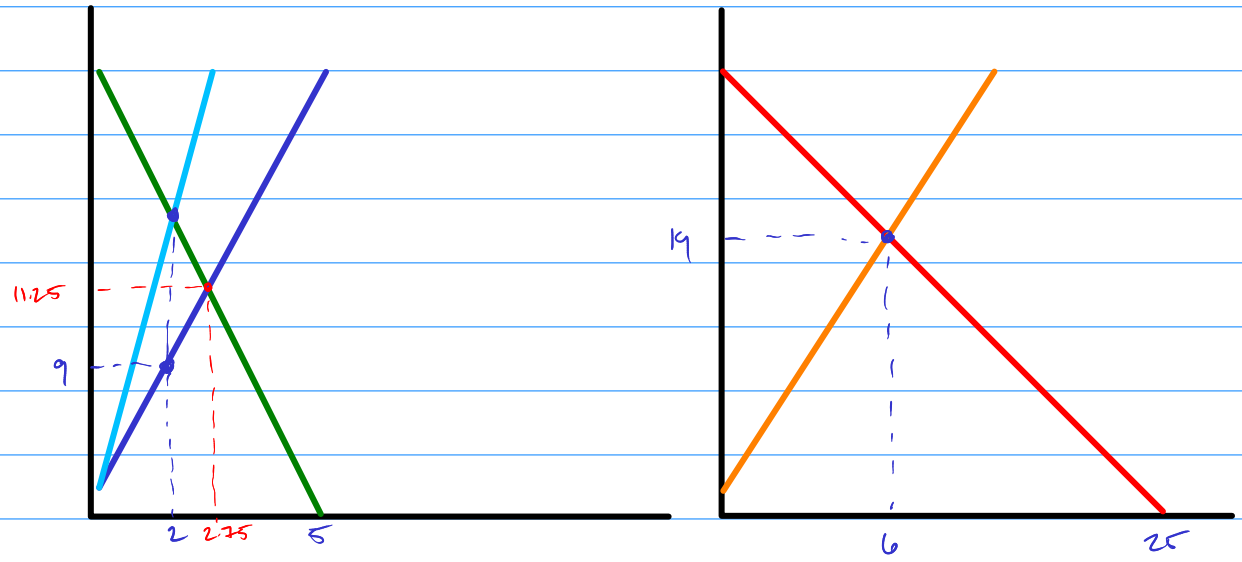
$$25 - L_D = 1 + 3L_S$$

$$24 = 4L \Rightarrow L^* = 6$$

$$W^* = 1 + 3(6) = 19$$

$$(19, 6)$$

(IV) Graph both labor markets side by side



(V) Suppose the government implements a implements a minimum wage equal to $W_{min} = 19$. Is it binding in either city. Is the monopsony better off?

Not binding for B.

$$25 - 5L = 19 \Rightarrow L^{min} = \frac{6}{5}$$

(vi) Which minimum wage is most efficient

(vii) Why is this difficult in real life?