Deferments and the Relative Cost of Conscription

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Economists played

a major role in ending

conscription in the

U.S. in 1973

(Gates Commission).

The main economic objection to conscription:

the implicit tax on draftees as some with reservation wages in excess of the military wage are compelled to serve.

Friedman (1967): conscription might involve lower social cost than a volunteer military if a large % of the relevant population was required for military svc.

This is due to the deadweight cost of taxation required to finance a military.

This idea was developed by Johnson (1990), Lee & McKenzie (1992), & Ross (1994).

Other costs of conscription:

1) too large K/L

2) excessive turnover

3) lower productivity of draftees

4) evasion costs

Mulligan (2008):

commutation is

allowed---a fee to

avoid svc.

However, since the CW, there has been no commutation or substitution.

Deferments have existed for medical, occupational, & educational reasons.

Some deferments are costless, but others are not.

People expend resources to obtain deferments.

They can “dodge up” (Kuziemko, 2008) or “dodge down.”

Dodge up:
Invest in human capital when it's not otherwise worthwhile to do so.

Dodge down: become unfit medically, or commit serious enough crimes.

Costly deferments are the same as commutation (and substitution):

high reservation wage individuals avoid service.

Costly deferments are

different than

commutation:

the former involve

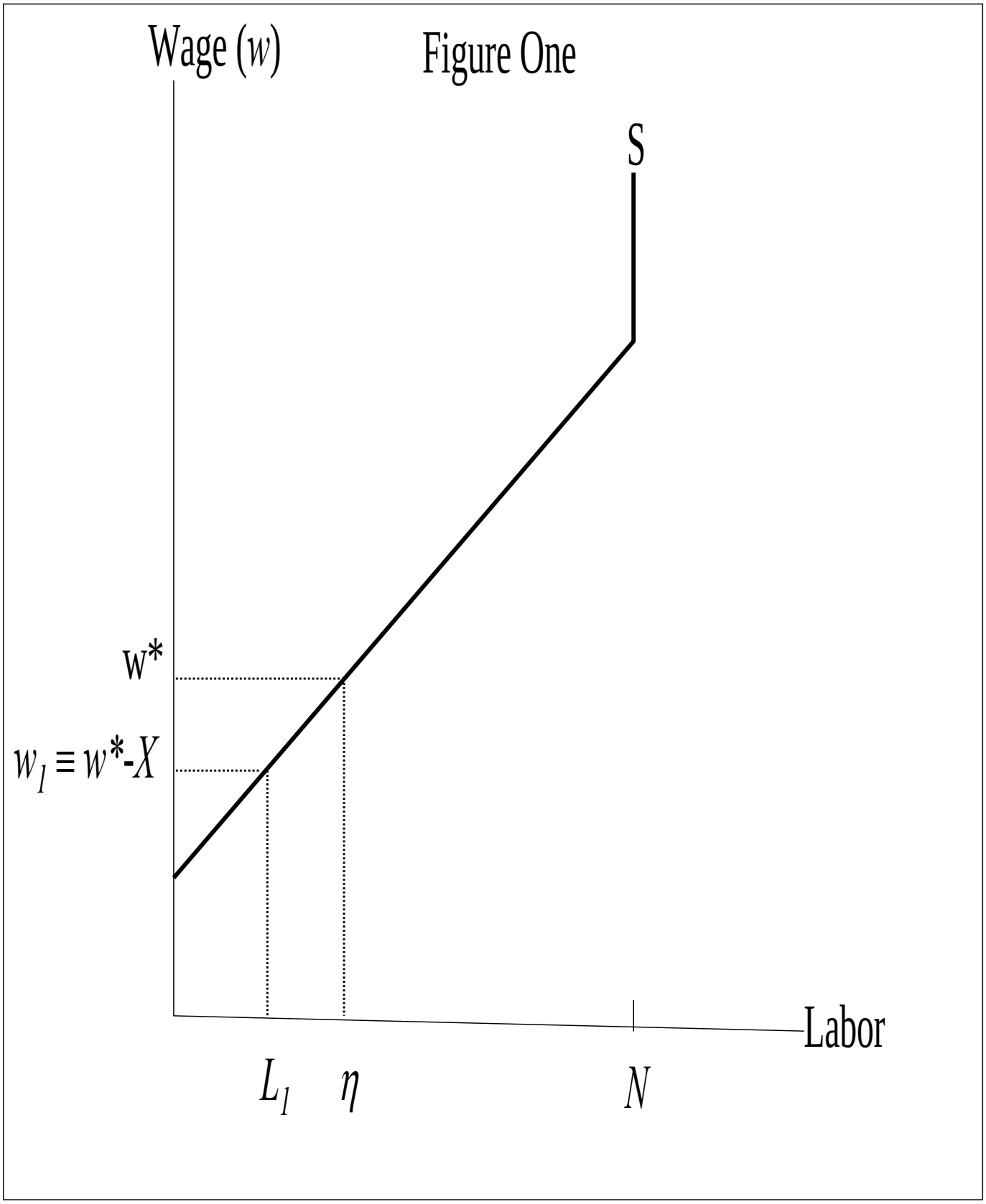
social cost.

A model with deferments

Selective deferments

- N individuals subject to conscription.
- The military's demand for labor is fixed at η, $\eta < N$.
- w_R equals an individual's reservation wage.

- To get η *to volunteer, pay w**.
- O_η is the opportunity cost of the η lowest reservation wage individuals.
- Figure One: O_η is area under labor supply out to η.


Wage (w)
Figure One
S
w*
$w_1 \equiv w^* - X$
Labor
L_1
η
N

- X = cost of a deferment.

- Set $w_M = w^* - X$ in order to attract η---L_1 who volunteer & η-L_1 who are drafted.

- If govt. can defer those with highest w_R, conscription is cheaper: deadweight cost of taxation ↓ because payroll ↓.

- It is highly unlikely govt. can identify & costlessly defer those with the highest w_Rs

- Ostensibly, this was the objective during WWI.

- However....

1) Discretion by local draft boards; &

2) Some with high w_Rs had low earnings (w_Rs reflected non-pecuniary factors).

Costly deferments

- C_V = social cost with volunteer military

- C_C = social cost with conscription

- $C_V = O_\eta + t\eta w^*$

- $C_C = O_\eta + t\eta(w^* - X) + (N - \eta)X$

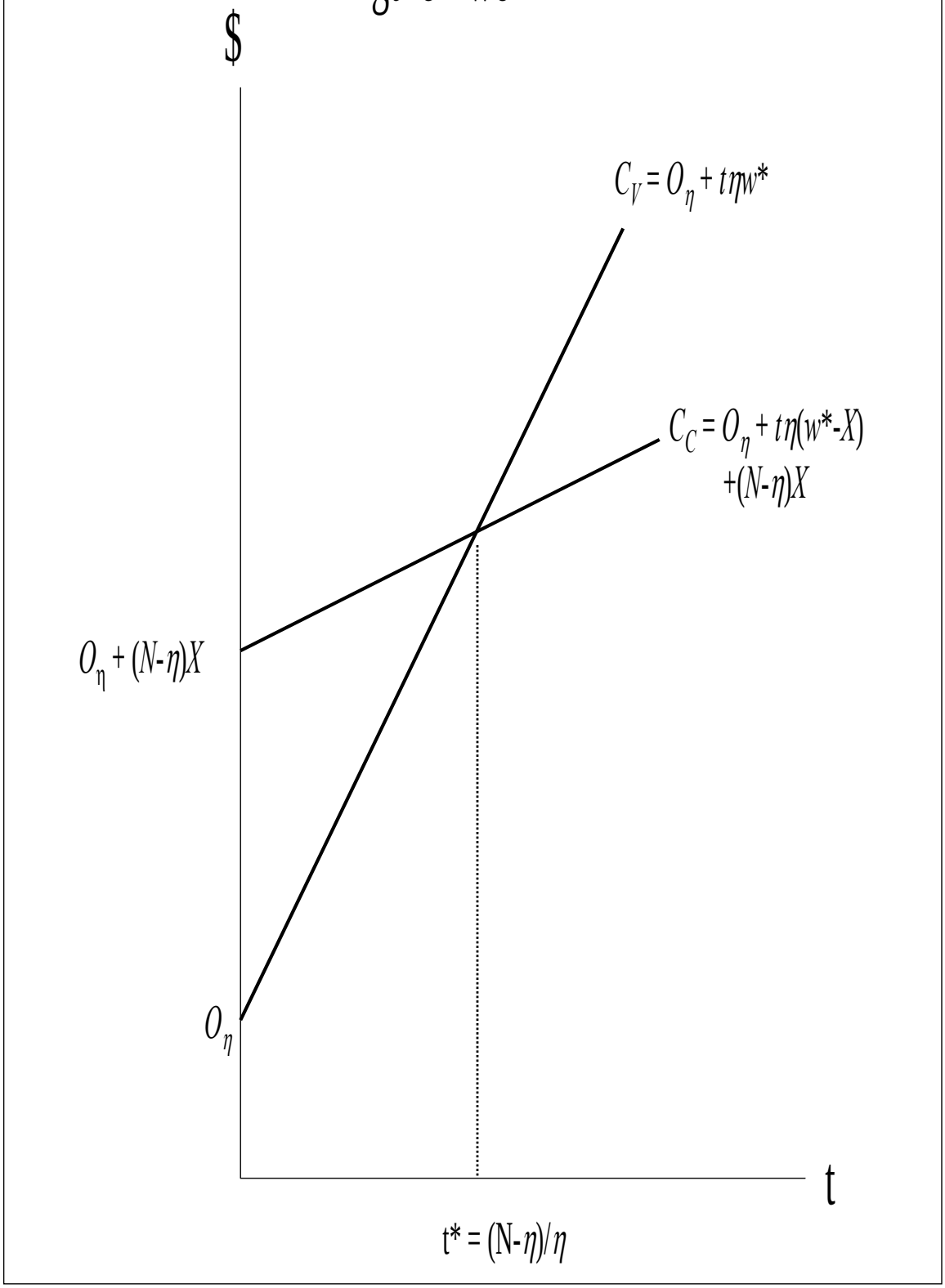
- t = DWL per \$
- When is $C_C < C_V$?

$$t > \frac{N-\eta}{\eta} \equiv t^*, \text{ or}$$

$$\frac{1}{1+t} \equiv \left(\frac{\eta}{N}\right)^* < \frac{\eta}{N}$$

- See Figure Two.

Figure Two



- X has no effect on t^*; as $X\uparrow$, $w_M = w_I\downarrow$ as does DWL; the # who defer, N-η, is unchanged.

- The reduction in DWL per unit change in X equals $t\eta$, so, if $t\eta > N$-η, $C_C < C_V$.

- When might η/N be large enough for $C_C < C_V$?

- Table One.

Table One		
War	% of the pop. in the military	Column 2 ÷ by the # for WWII
Civil War	10.4	.92
WWI	4.5	.4
WWII	11.3	1.0
Korea	3.5	.31
Vietnam	4.1	.36

- Feldstein (1999) found DWL of .32 (existing tax rates) & .78 (10% increase in all MTRs) for 1994.

- Using DWL of .78:

$$\Rightarrow \frac{1}{1+t} \equiv \left(\frac{\eta}{N}\right)^{*} = .56.$$

- Fraction of those eligible for military (based on age, health, and mental apptitude) who served in WW2 (Segal & Segal 2004):

MTRs

- DWL is a positive function of marginal tax rates (MTRs) & ξ_{Labor}^{Supply}.

- Table Two.

Table Two.		
Year	Ave. MTR (Seater and Stephenson)	Ave. MTR (Barro and Sahasakul)
1942	14.2	13.4
1943	16.8	14.8
1944	14.8	18.3
1945	15.0	18.6
1994	17.4	21.5

- Maybe WW2 was near $\left(\frac{\eta}{N}\right)^*$.
- I would like to have estimates of ξ_{Labor}^{Supply} for the 1940s & 1990s.

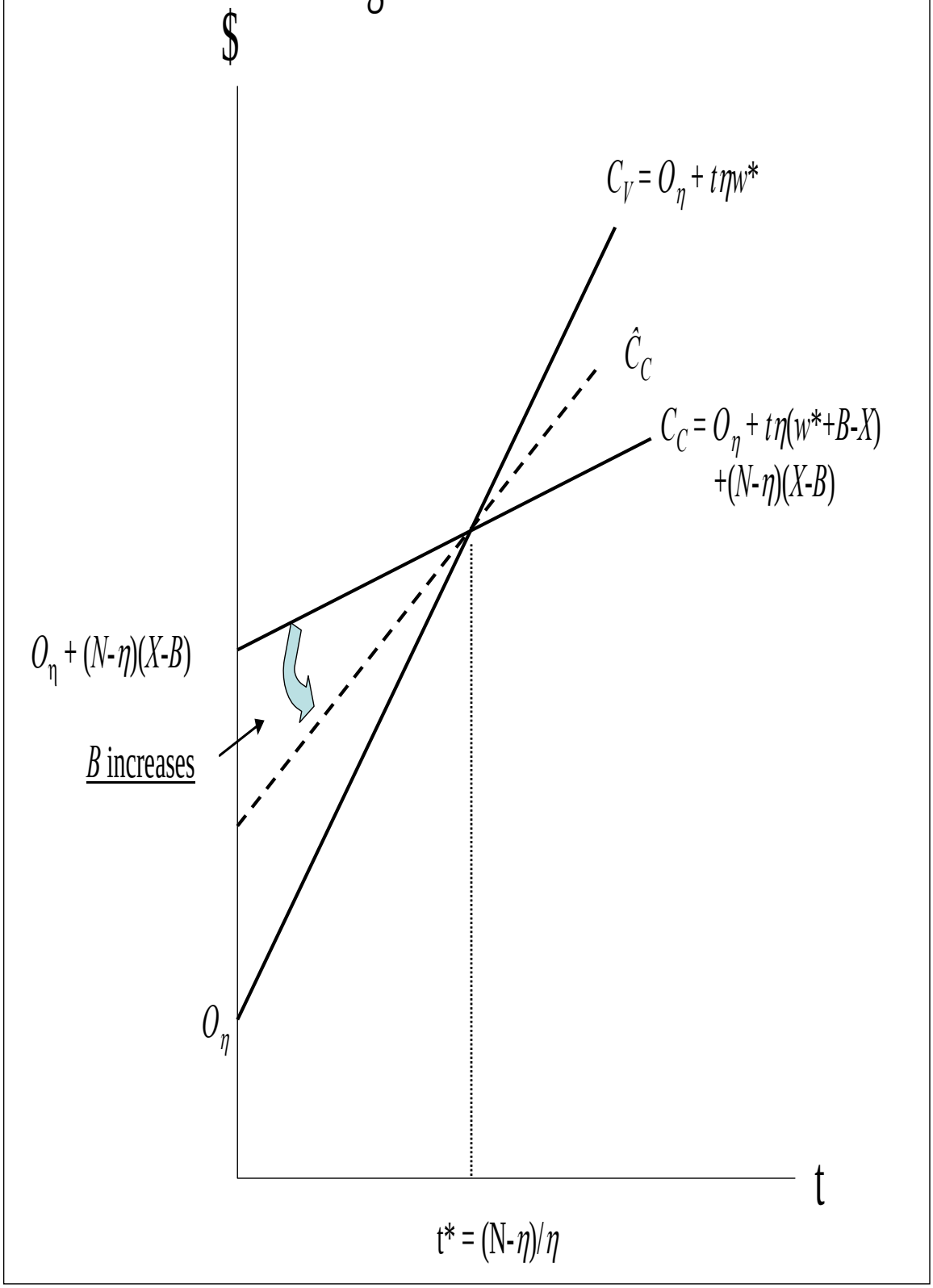
Positive (social) benefits from deferments

- Benefits = $B < X$.

- When $B\uparrow$, $C_C \downarrow$ (direct effect).

- $B\uparrow$, $C_C \uparrow$ (indirect effect) because $w_M \uparrow$.

Figure Three



- For $t < t^*$, should not have conscription.

If we do, should try to raise B because $C_C \downarrow$.

- Govt. likely wants $B \downarrow$ (lower w_M).

- For $t > t^*$, <u>should</u>

have conscription.

If we do, should try to lower B because $C_C \downarrow$, & govt. likely wants to do this.

Costless deferments are widely available

- $C_C \downarrow$: fewer spend X.

- $C_C \uparrow$: some of the "wrong" people are inducted.

- $C_C \uparrow$: $w_M \uparrow$ to get η.

- λ is the faction of the pop. with costless deferments.

- $C_C < C_V$ if:

$$\frac{\lambda X}{2\eta} + \frac{N - \eta - \lambda X}{\eta} < t.$$

$$\frac{\lambda X}{2\eta} + \frac{N - \eta - \lambda X}{\eta} \equiv t^{**}$$

- t^{**} is not appreciably affected by λ.

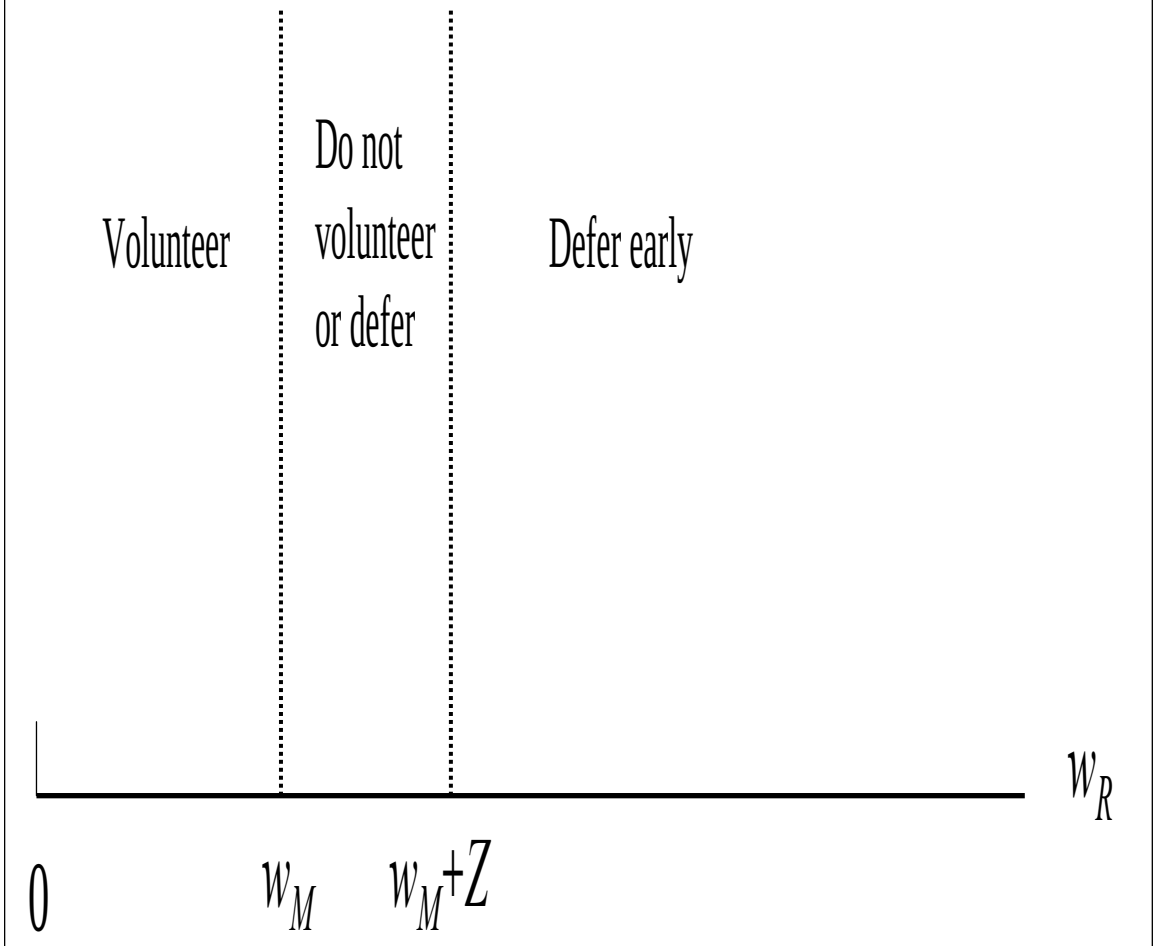
Early deferments

- One can get a deferment before being drafted at a cost of $Z < X$.

- Prob. of being drafted is p.

Figure Four

$p \geq Z/X$



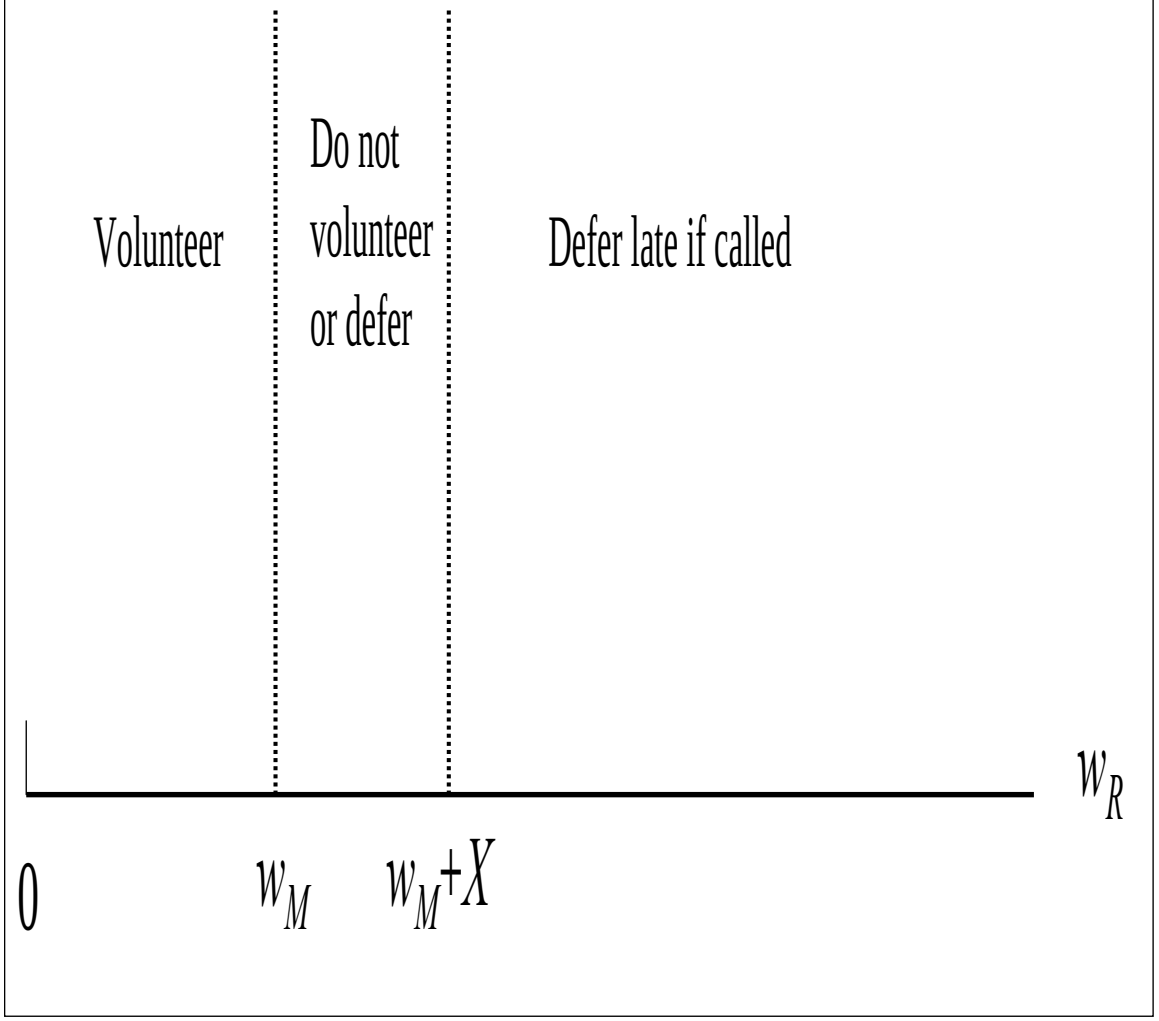
- No one will choose late deferment (@ a cost of X).

- Then optimally set $w_M = w^* - Z$ (& $p = 1$).

- Since $Z < X$, $w_M \uparrow$.

Figure Five

$p < Z/X$



- No one will choose early deferment.

- $p < Z/X \Rightarrow$ $w_M > w^* - Z$.

- Would govt. set $p < Z/X$?

Yes, if bgt. = payroll + turnover cost.

☺ I am done!! ☺