



$$C = a + b(Y - T)$$

$C = a + bY - bT$

$$C = (a - b^T) + by$$

Example:  $T \equiv 700$

$$C = 10000 + 0.9(Y - 7000)$$

$$C = 10000 + 0.9 * Y - 0.9 * 700$$

$$C \equiv (10000 - 0.9 * 7000) + 0.9 * Y$$



$$C = (10000 - 630) + 0.9Y$$

T

=

T

+

t

Y

$$C = a + b(Y - (T + tY))$$

$$C = a + bY - b(T + tY)$$

$C = a + by - bT - btY$

$$C \equiv (a - bT) + (b - bt)Y$$

Example:  $T = 700 + 0.25Y$

$$C = 10000 + 0.9(Y - 700 - 0.25Y)$$



$$CC = (10000 - 630) + (0.9 - 0.9 * 0.25)Y$$

$$C = (10000 - 630) + Y(0.9 - 0.25)$$

$$CC = (10000 - 630) + 0.675Y$$

Slope

C and AE

= b

Slope

C and AE

=  $b - b_t$





Variable taxes  $T = T + tY$



Lump Sum taxes T



Intercept same, smaller slope

## Lump Sum taxes $T$

$$C = a + b(Y - T)$$

Slope

$$C = a + bY - bT$$

C and AE

$$C = (a - bT) + bY \longrightarrow \text{slope} = b$$

Example:  $T = 700$

$$C = 1000 + 0.9(Y - 700)$$

$$C = 1000 + 0.9*Y - 0.9*700$$

$$C = (1000 - 0.9*700) + 0.9*Y$$

$$C = (1000 - 630) + 0.9Y$$

## Variable taxes $T = T + tY$

$$T = T + tY$$

$$C = a + b(Y - (T + tY))$$

$$C = a + bY - b(T + tY)$$

Slope

$$C = a + bY - bT - btY$$

C and AE

$$C = (a - bT) + (b - bt)Y \longrightarrow \text{slope} = b - bt$$

Example:  $T = 700 + 0.25Y$

$$C = 1000 + 0.9(Y - 700 - 0.25Y)$$

$$C = (1000 - 630) + (0.9 - 0.9*0.25)Y$$

$$C = (1000 - 630) + Y(0.9 - 0.225)$$

$$C = (1000 - 630) + 0.675Y$$

Intercept same, smaller slope

