





Slope

$$Y - Tx + Tr = C + S$$




Disposable  
Income is used  
for Consumption  
and Saving

With Government

$$Y - C = Tx + Tr = S$$

$$Y - (A + MPCY) - Tx + Tr = S$$


$$C = A + MPCY$$



$$Y - A - MPCY - Tax + Tr = S$$

$$-A + Y - MPCY - T_x + T_r = S$$

$$-A + (1 - \text{MPC})Y - T_x + T_r = S$$

$$-A - T_x + Tr + (1 - MPC)Y = S$$

$$S = -A - \text{Tx} + \text{Tr} + (1 - \text{MPC})Y$$



$$A = a - \text{MPC}^{\text{Tx}} + \text{MPC}^{\text{Tr}}$$

$$S = - (a - MPC^T x + MPC^T r) - Tx + Tr + (1 - MPC)Y$$

$$S = -a + MPC_T x - MPC_{Tr} + Tr + (1 - MPC)Y$$



$$S = -a + \text{MPC}T_x - T_x - \text{MPC}T_r + T_r + (1 - \text{MPC})Y$$

$$S = -a - (1 - \text{MPC})^T x + (1 - \text{MPC})^T r + (1 - \text{MPC})Y$$



Intercept

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-

MP

P

C

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MPRS

$$S = -a - \text{MPS}_T x + \text{MPS}_T r + \text{MPS}_T y$$

## With Government

$$Y - T_x + T_r = C + S$$

$$Y - C - T_x + T_r = S$$

$$\downarrow C = A + MPCY$$

$$Y - (A + MPCY) - T_x + T_r = S$$

$$Y - A - MPCY - T_x + T_r = S$$

$$-A + Y - MPCY - T_x + T_r = S$$

$$-A + (1-MPC)Y - T_x + T_r = S$$

$$-A - T_x + T_r + (1-MPC)Y = S$$

$$S = -A - T_x + T_r + (1 - MPC)Y$$

$$\downarrow A = a - MPC T_x + MPC T_r$$

$$S = -(a - MPC T_x + MPC T_r) - T_x + T_r + (1 - MPC)Y$$

$$S = -a + MPC T_x - MPC T_r - T_x + T_r + (1 - MPC)Y$$

$$S = -a + MPC T_x - T_x - MPC T_r + T_r + (1 - MPC)Y$$

$$S = -a - (1 - MPC)T_x + (1 - MPC)T_r + (1 - MPC)Y$$

$$1 - MPC = MPS$$

$$S = \underbrace{-a - MPS T_x + MPS T_r}_{\text{Intercept}} + \underbrace{MPS Y}_{\text{Slope}}$$

Intercept

Slope

With Government