

3. National Income and Equilibrium Determination (Feb 18)

EE 212

Case & Fair, ch. 8; LCR, ch. 23-24

February 2013

$$DAE = C^d + I + G + (X - M)$$

at equilibrium; $Y = Y_E^* = DAE$

$$Y = (60 + 0.8Y^d) + 35 + 15 \\ + 36 - (10 + 0.24Y)$$

$$= (60 + 0.8(Y - T)) + 35 + 15 + 36 \\ - 10 - 0.24Y$$

$$= (60 + 0.8(Y - 20 - 0.2Y)) + 35 + 15 \\ + 36 - 10 - 0.24Y$$

$$= \underline{60} + \underline{0.8Y} - \underline{16} - \underline{0.16Y} + \underline{35} + \underline{15}$$
$$+ \underline{36} - \underline{10} - \underline{0.24Y}$$

$$Y = 120 + 0.4Y$$

$$0.6Y = 120, \quad Y = Y_E^* = 200$$

$$S + T + M = I + G + X$$

$$[-60 + 0.2(Y - T)] + T + M = I + G + X \quad \text{: substitute } S$$

$$-60 + 0.2Y - 0.2T + T + M = I + G + X \bullet$$

$$-60 + 0.2Y + 0.8T + M = I + G + X \bullet$$

substitute T

$$-60 + 0.2Y + 0.8(20 + 0.2Y) + M = I + G + X$$

$$-60 + 0.2Y + 16 + 0.16Y + M = I + G + X$$

substitute
M, I, G, X