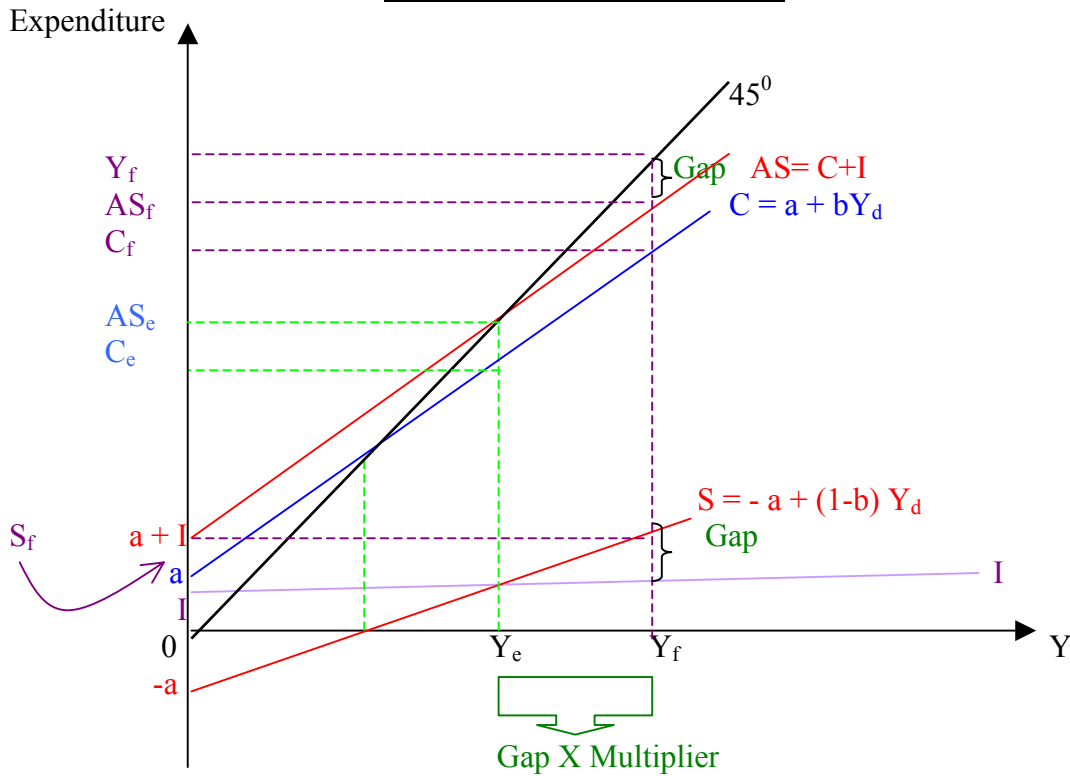


The Simple Keynesian Model



C: Aggregate Consumption

S: Aggregate Saving

Y_d: Aggregate income (output)

C_e: Aggregate Consumption at equilibrium

C_f: Aggregate Consumption at full employment

S_e: Aggregate saving at equilibrium

S_f: Aggregate saving at full employment

I: Aggregate Investment

Y_e: equilibrium level of aggregate output and income

Y_f: full employment level of aggregate output and income

a: autonomous consumption.

b: Marginal Propensity to Consume (MPC)

1-b: Marginal Propensity to Save (MPS)

AS: Aggregate Spending = C + I

AS_e: Aggregate spending at equilibrium

AS_f: Aggregate spending at full employment

Gap = S_f - I

Gap = Y_f - AS_f = Y_f - (C_f + I)

Gap = (Y_f - Y_e) / Multiplier

The simple Keynesian multiplier $k = 1/(1-b)$

$$Y_e = k (a + I)$$

$$C = a + b Y_d$$

$$C_e = a + b Y_e$$

$$C_f = a + b Y_f$$

$$S = -a + (1-b) Y_d$$

$$S_e = -a + (1-b) Y_e \text{ which is also equal to } = Y_e - C_e \text{ and also } = \text{Investment}$$

$$S_f = -a + (1-b) Y_f \text{ which is also equal to } = Y_f - C_f$$

$$Y = C + S$$

$$Y_e = C_e + S_e$$

$$Y_f = C_f + S_f$$

$$AS = C + I$$

$$AS_e = C_e + I$$

$$AS_f = C_f + I$$

$$\text{Gap} = S_f - I$$

$$\text{Gap} = Y_f - AS_f = Y_f - (C_f + I)$$

$$\text{Gap} = (Y_f - Y_e) / \text{Multiplier}$$