

ALTERNATIVE EFFECTIVE DEMAND AND EMPLOYMENT

TWO-SECTOR MODEL

The simple theory of effective demand divides the economy into two sectors, one producing capital goods (k), the other producing consumption goods (c). Total income in the economy, as well as in each sector, is made up of wages and profits. The important distinction that this model elucidates is between the *source* and *use* of each type of income. Total income (Y_t) is equal to total wages (W_t) plus total profits (P_t):

$$Y_t = W_t + P_t \quad (1)$$

Income in the capital good sector (Y_k) is equal to wages in the capital goods sector (W_k) plus profits in the capital goods sector (P_k), and income in the consumption goods sector (Y_c) is equal to wages in the consumption goods sector (W_c) plus profits in the consumption goods sector (P_c):

$$Y_k = W_k + P_k \quad (2)$$

$$Y_c = W_c + P_c \quad (3)$$

Wages are entirely spent on consumption, giving us the equation displaying demand in the consumption goods sector:

$$Y_c = W_c + W_k \quad (4)$$

Substituting equation (4) into equation (3) we obtain:

$$W_c + W_k = W_c + P_c \quad (5)$$

Therefore:

$$W_k = P_c \quad (6)$$

Thus the wage bill in the capital goods sector equals profits in the consumption goods sector. This is, in essence, the basis of Ricardo's reply to Malthus's claim that unproductive consumption is necessary to prop up demand. It also shows that a rise or fall in the wage bill of the capital goods sector will result in a corresponding change in the consumption goods sector's profits.

From equations (2) and (3) it can be seen that:

$$Y_c + Y_k = W_c + P_c + W_k + P_k \quad (7)$$

Subtracting equation (4) from equation (7):

$$Y_k = P_c + P_k \quad (8)$$

Thus, total profits equal total investment. This can also be shown from:

$$Y_t = W_t + P_t \quad (9)$$

$$Y_t = C_t + I_t \quad (10)$$

$$W_t = C_t \quad (11)$$

$$I_t = P_t \quad (12)$$

Profits are savings and are determined by the volume of investment. Thus Kalecki's aphorism: "capitalists get what they spend, workers spend what they get." Of course, it is important to emphasize that this holds only in the aggregate. And the key is that causality runs from investment to profits ($I \Rightarrow P$), just as in Keynes causality runs from investment to savings ($I \Rightarrow S$). So this understanding of the investment-profits relation cannot be used to support, e.g., capital gains tax cuts (as opposed to an investment tax credit).

Another feature of the two-sector model is that it shows that a change in the real wage will reallocate profits between sectors. If the real wage rises, then the higher real wage bill in the capital goods sector will result in lower profit in that sector. At the same time, the higher capital goods sector wage bill will raise profit in the consumer goods sector. Since total profit will remain constant as long as total investment remains the same, a reallocation of profit between sectors has taken place as a result of a change in the level of the real wage.

From the simple alternative multiplier, $1/(1-wn)$, it is clear that increases in the wage rate increase employment through the impact on demand. However, n is the inverse of productivity, so increased productivity lowers employment (*ceteris paribus*). If both the wage rate and productivity rise at the same rate, employment will decrease. The wage rate must rise faster than the rate of increase in labor productivity in order to maintain employment. Again, profits will be constant as long as investment is constant.