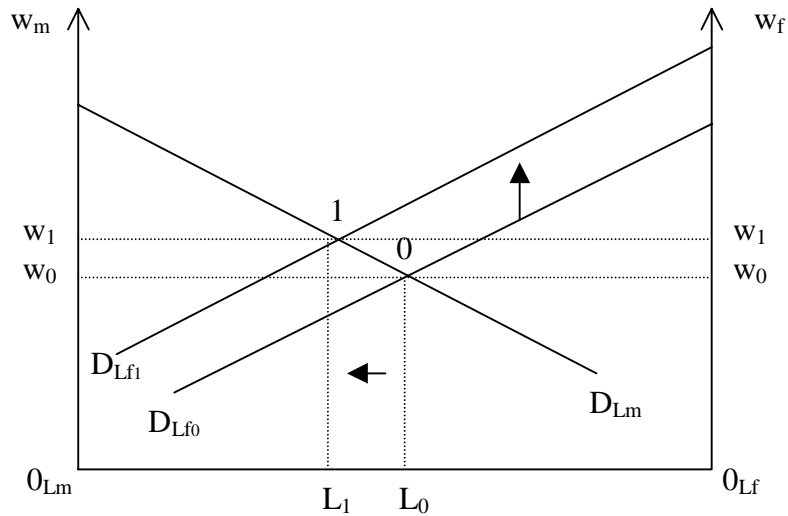


Answers to Questions from Chapter 4 (SFM)

1. (a)

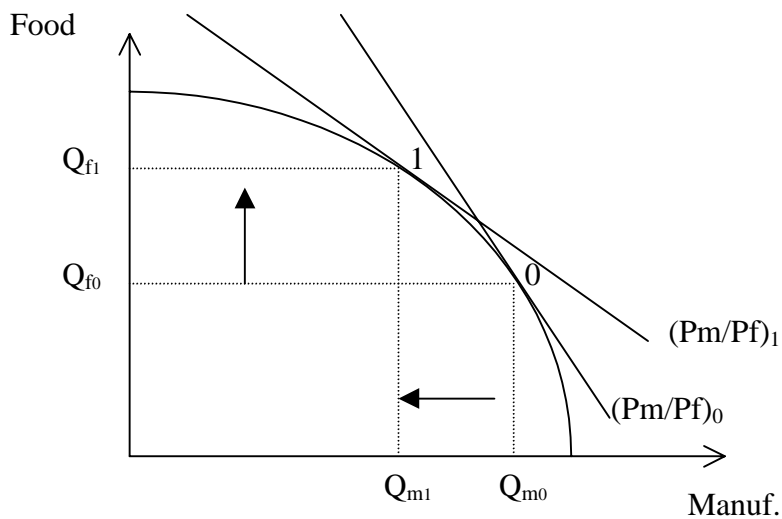


The demand for labor in the food sector rises as the price of food increases.

(b) Wages rise from w_0 to w_1 in the diagram above. Notice that the rise in wages is less than the increase in the price of food.

(c) Workers move from manufacturing into the food sector as shown by the movement from L_0 to L_1 . As more (fewer) workers are employed in food (manufactures), the output in the food (manufacturing) sector rises (falls).

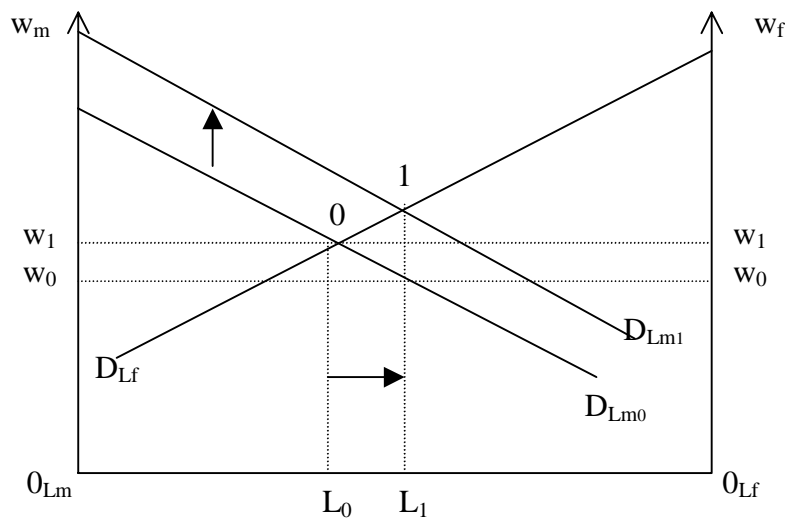
(d) The diagram below shows that the falling price of manufactures (relative to food) leads to a reduction in the output of manufactures and a rise in the production of food.



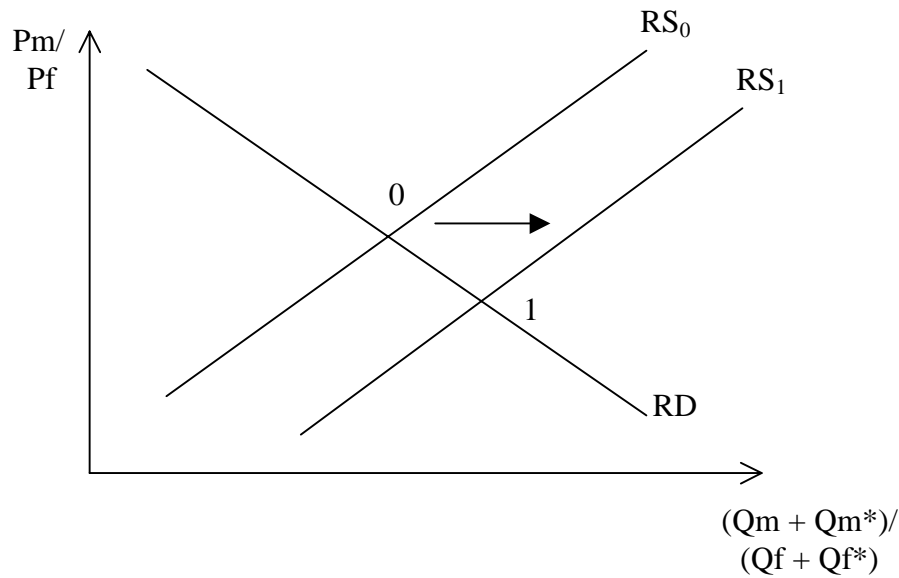
(e) The owners of capital are worse off, as the price of manufactures has fallen. In addition, the movement of labor out of the manufacturing sector raises the K/L ratio, thereby lowering the MP_K . The landowners are better off because the price of food has risen. Moreover, the T/L ratio has fallen with the movement of labor into the food sector, which raises the MP_T .

(f) Real wages have fallen in terms of food and risen in terms of manufactures. If manufactures are more important in the workers' consumption bundle, then the workers are better off.

(2) The rising capital stock increases the demand for labor in manufactures because it raises the K/L ratio and the MP_{Lm} . Rising wages in the manufacturing sector draws workers out of the food sector. This leads to a reduction in the production of food and an increase in the production of manufactures. The diagram below illustrates the changes in the labor market.



The increased production of manufactures (at constant world prices) shifts the relative supply of manufactures outward, as shown in the diagram below.



Holding relative prices fixed, the higher capital stock will increase the return to labor and lower the returns to land and capital. Workers in the manufacturing sector are better off because they have more capital to work with, which raises the K/L ratio and the MP_{Lm} . Wages are also higher in the food sector because the T/L ratio rises as workers leave the food sector to enter the manufacturing sector. This raises the MP_{Lf} . The landowners are worse off because the rising T/L ratio reduces the MP_T . The increased capital stock lowers the MP_K and therefore reduces the earnings of capital owners.