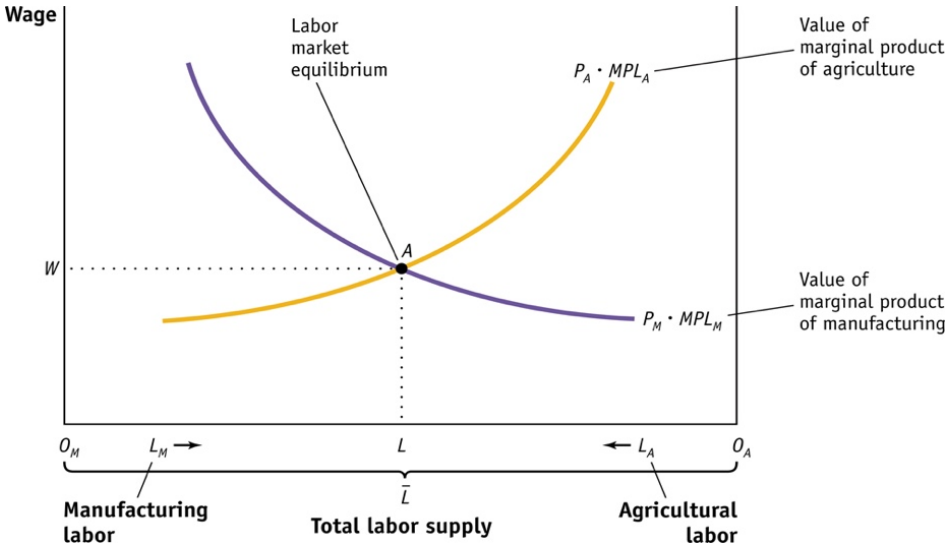
Note: Earnings of Labor in the SFM

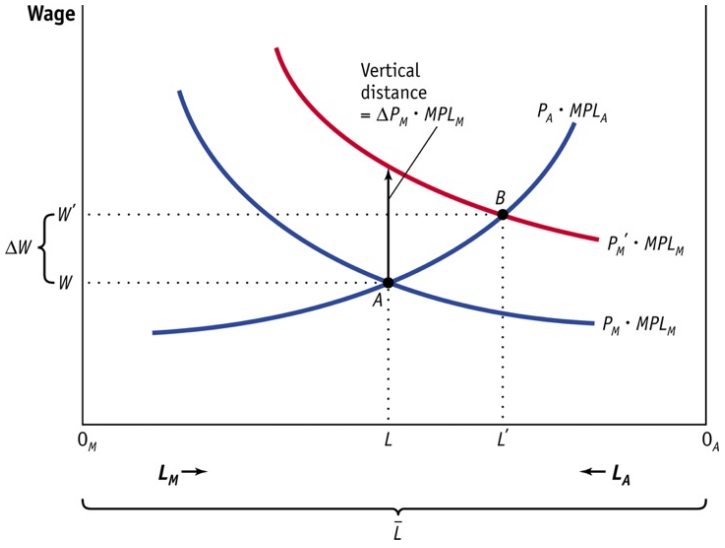
Earnings of Labor

To determine the impact of international trade on wages in the two sectors, first put the marginal product of labor for agriculture and manufacturing on the same graph.



- The horizontal axis denotes the total amount of labor, $\bar{L}$, with the amount of labor used in manufacturing, L_M, measured from left (0_M) to right, and the amount of labor used in agriculture, L_A, measured from right (0_A) to left.
- The equilibrium wage is given by the intersection of the marginal product of labor in each sector multiplied by its respective price.
- With the equilibrium wage at point A, the economy uses $0_M L$ units of labor in manufacturing and $0_A L$ units of labor in agriculture.

Effect of Change in Relative Price of Manufactures on the Wage



Suppose the higher relative price of manufactures is due to an increase in the price of manufacturing, P_M.

- ⇨ This shifts $P_M * MPL_M$ to the right
- ⇨ The new equilibrium nominal wage is higher than the old equilibrium nominal wage

Effect on Real Wages

Real wage in terms of manufactured goods W / P_M falls

Real wage in terms of agricultural goods W / P_A increases

- ⇨ Whether labor is better off or worse off due to the increase in the price of manufactures depends on whether the individual prefers to purchase more manufacturing goods or agricultural goods.

- ⇨ An increase in the price of manufactured goods results in an ambiguous effect on the well-being of labors since the effect on real wage is undefined.

Reference

Feenstra and Taylor, International Trade, 3rd ed