INTERNATIONAL MIGRATION OF LABOR

Traditional trade theory assumes that the factors of production are internally mobile but do not cross national boundaries. This assumption, of course, is far from reality. Factors of production are internationally mobile to a greater or lesser degree. With the flow of factors, a country that is scarce in a particular input can import goods which use that factor intensively or can import the input itself. In essence goods and factors can be viewed as substitutes for each other.

The great labor migrations of the turn of the century fueled American industrialization, led to the labor union movement, and have given the US its mosaic diversity. This diversity is increasing as the source of immigrants has changed over time. Instead of Europe as a primary source, as was true at the turn of the century, today’s immigrants are coming primarily from Latin America and Asia.

As the industrial world’s population ages, so to will its acceptance of inflows of labor from developing nations. Already, Europe is home to many immigrants from North and Sub-Saharan Africa, Turkey and South Asia. The United States is home to many immigrants, both legal and illegal, from Latin America. Even in Japan the aging population will face a choice between increasing immigration or see a reduction in their standard of living. The international migration of labor is becoming more and more prevalent as labor moves from the relatively young but poor developing world to the aging and rich industrial world.

Labor Migration

The Heckscher-Ohlin model would predict that with increased international trade input prices across countries would narrow and eventually become equal. This is obviously not occurring on a grand scale but is correct with respect to the industrial countries. At the end of WWII there were large discrepancies between US wages and wages in Europe or Japan. Over the course of time as the differences in labor productivities of these countries narrowed, so did the wage differentials. The present differences in wages are as a result of differing technologies, imperfect competition, transportation costs, and government policies (in particular commercial policies).

If the difference in the returns to labor between two countries is sufficiently high to compensate for the costs of relocating, then there will be at least some who will attempt to emigrate. The consequences of this migration requires an analysis of labor markets. In essence the migration of labor from one country to another represents shifts in the supplies of labor in both countries. This will also be an important tool in studying the forces of economic development as labor migrates from rural to urban areas.

The demand for labor is based on labor productivity and the revenues earned from the additional output that an increase in labor produces. The rationale for the firm to hire additional labor is so that it can earn revenues from the sale of the additional output that labor produces. This has two components - additional output and additional revenue. The increase in output as the firm hires an additional unit of labor holding all else constant is termed Marginal physical product of labor (MPPL). The MPPL is dependent on the amount of capital available to labor and the amount of labor with whom the additional
unit of labor must share this capital. As a firm hires more and more labor with a given amount of capital, the MPPl declines, a phenomenon called **Diminishing Returns**.

The demand for labor by a particular firm is dependent upon the demand for the good that it produces. If a product is not in demand then there will be no demand for labor to produce the good. Conversely, the greater the demand for the product, the greater will be the demand for labor. An increase in demand for the product will increase the product’s price and the firm’s **marginal revenue**, the additional revenue earned from the sales of additional output.

The demand for the additional unit of labor, therefore, will be equal to the amount of revenue earned on the additional output that the additional labor produces. This is called the **Value of the Marginal Product of labor (VMPl)**. VMPl, mathematically, is the product of MPPl and Marginal Revenue.

VMPl decreases with additional labor due to diminishing returns. But an increase in the amount of capital available per unit labor will increase labor's productivity. Simply, the more and better the tools that labor has to work with the productive will be labor. Therefore, VMPl rises with the level of capital.

Suppose, as in Figure 1, we have two countries A and B. In country A there is an abundance of capital and in country B there is an abundance of labor. This is illustrated by the demand and supply curves. The demand for labor is high in country A due an abundance of capital, whereas the supply for labor in country B lies relatively far to the right. The supply curves, representing the countries’ labor forces, are vertical because supply in this context depends on population size and is independent of the price paid to labor.

The demand for labor will be greater in the capital abundant country and will result in a higher return to labor. In country A the wage paid to labor, Wa, is greater than the wage paid in country B, Wb. If this difference is sufficiently high, then labor will migrate from country B to country A.

![Figure 1](image-url)
The effect of this migration can be clearly seen if we combine the two graphs into one, as shown in Figure 2. The horizontal axis now measures the total amount of labor in both countries. The distribution of labor between the two countries is determined by the relative distance of the supply curve, Sa & Sb, from the two axes. The amount of labor in country A is measured as the horizontal distance from the left hand origin. For country B, it is measured as the distance from the right hand origin. As we move from left to right, the amount of labor in country A is increasing by the amount that labor is decreasing in country B.

The wage in country A, before migration, is Wa, where VMPLa equals Sa. The wage in country B is Wb, where VMPLb is equal to Sb. Since Wa is larger than Wb, labor will migrate leaving country B and going to country A. This migration causes labor supply to rise in country A and fall in country B. This is shown as the shift in the supply curve Sa & Sb to Sa’ & Sb’, which drives down the wage in country A and simultaneously raises it in country B. Migration will occur until labor’s wage is the same in both countries. The political economy of this is clear. Labor in A will resist labor migration which results in a lower wage.