

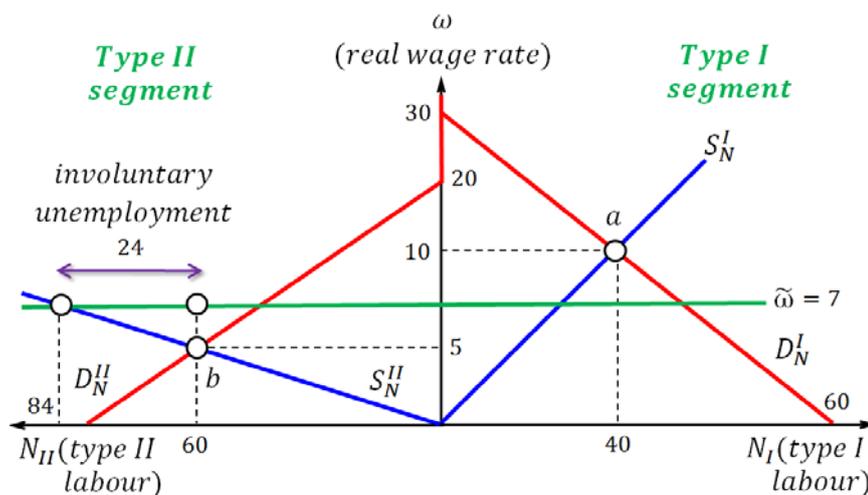
A segmented labour market model

Suppose workers may have some (perhaps economically irrelevant) feature that the (owners of) firms may like or dislike (for instance, being a man). Firms classify workers in two types (I and II) depending on whether they possess the feature or not.

Some firms (type I firms) prefer type I workers; the rest (type II firms) prefer type II workers. Each type of firms defines a different competitive labour market. Workers are unaware of the fact that there are two types of firms. From their perspective, the labour market is not segmented.

• **Example.** Letting ω designate the real wage rate, the supply of labour function of type I workers is $S_N^I = 4 \cdot \omega$. The demand for labour function of type I firms is $D_N^I = 60 - 2 \cdot \omega$ ($N_I^d = 0$ if $\omega > 30$). The supply of labour function of type II workers is $S_N^{II} = 12 \cdot \omega$. The demand for labour function of type II firms: $D_N^{II} = 80 - 4 \cdot \omega$ ($N_{II}^d = 0$ if $\omega > 20$).

The market equilibrium for the type I segment is $(N_I, \omega_I) = (40, 10)$. The market equilibrium for the type II segment is $(N_{II}, \omega_{II}) = (60, 5)$. In this case, $\frac{40}{40+60} = \frac{2}{5} = 40\%$ of employment corresponds to type I workers and $\frac{60}{40+60} = \frac{3}{5} = 60\%$ to type II. Using these weights, the average real wage rate would be $\tilde{\omega} = \frac{2}{5} \cdot \omega_I + \frac{3}{5} \cdot \omega_{II} = \frac{2}{5} \cdot 10 + \frac{3}{5} \cdot 5 = 7$. At $\tilde{\omega} = 7$, no more type I workers than are actually employed would like to be hired. But, at $\tilde{\omega} = 7$, type II workers would like to supply $S_N^{II} = 12 \cdot \tilde{\omega} = 84$.



As employment of type II workers equals $N_{II} = 60$, there appears to be involuntary unemployment equal to $S_N^{II}(\tilde{\omega} = 7) - N_{II} = 84 - 60 = 24$. The unemployment rate is then $24 / (24 + N_I + N_{II}) = 19.3\%$. As shown in the figure on the left, each segment is in equilibrium although involuntary unemployment seems to exist.