MONOPSONY

A firm in a competitive factor market by definition faces a flat factor supply curve: it can hire as much as it wants at the going factor price. A monopsonist faces an upward-sloping factor supply curve: the more it wants to hire, the higher a factor price it must offer. A firm in a competitive factor market is a **price taker**. A monopsonist is a **price maker**.

The profit-maximization problem facing the monopsonist is

$$\max_x \; pf(x) - w(x)x.$$

The condition for profit maximization is that the marginal revenue from hiring an extra unit of the factor should equal the marginal cost of that unit. Since we have assumed a competitive output market the marginal revenue is simply pMP_x. What about the marginal cost?

The total change in costs from hiring Δx more of the factor will be

$$\Delta c = w\Delta x + x\Delta w,$$

so that the change in costs per unit change in Δx is

$$\frac{\Delta c}{\Delta x} = MC_x = w + \frac{\Delta w}{\Delta x}x.$$

The interpretation of this expression is similar to the interpretation of the marginal revenue expression: when the firm increases its employment of the factor it has to pay $w\Delta x$ more in payment to the factor. But the increased demand for the factor will push the factor price up by Δw, and the firm has to pay this higher price on all of the units it was previously employing.

We can also write the marginal cost of hiring additional units of the factor as

$$\begin{aligned} MC_x &= w\left[1 + \frac{x}{w}\frac{\Delta w}{\Delta x}\right] \\ &= w\left[1 + \frac{1}{\eta}\right] \end{aligned}$$

where η is the *supply* elasticity of the factor. Since supply curves typically slope upward, η will be a positive number. If the supply curve is *perfectly* elastic, so that η is infinite, this reduces to the case of a firm facing a competitive factor market. Note the similarity of these observations with the analogous case of a monopolist.

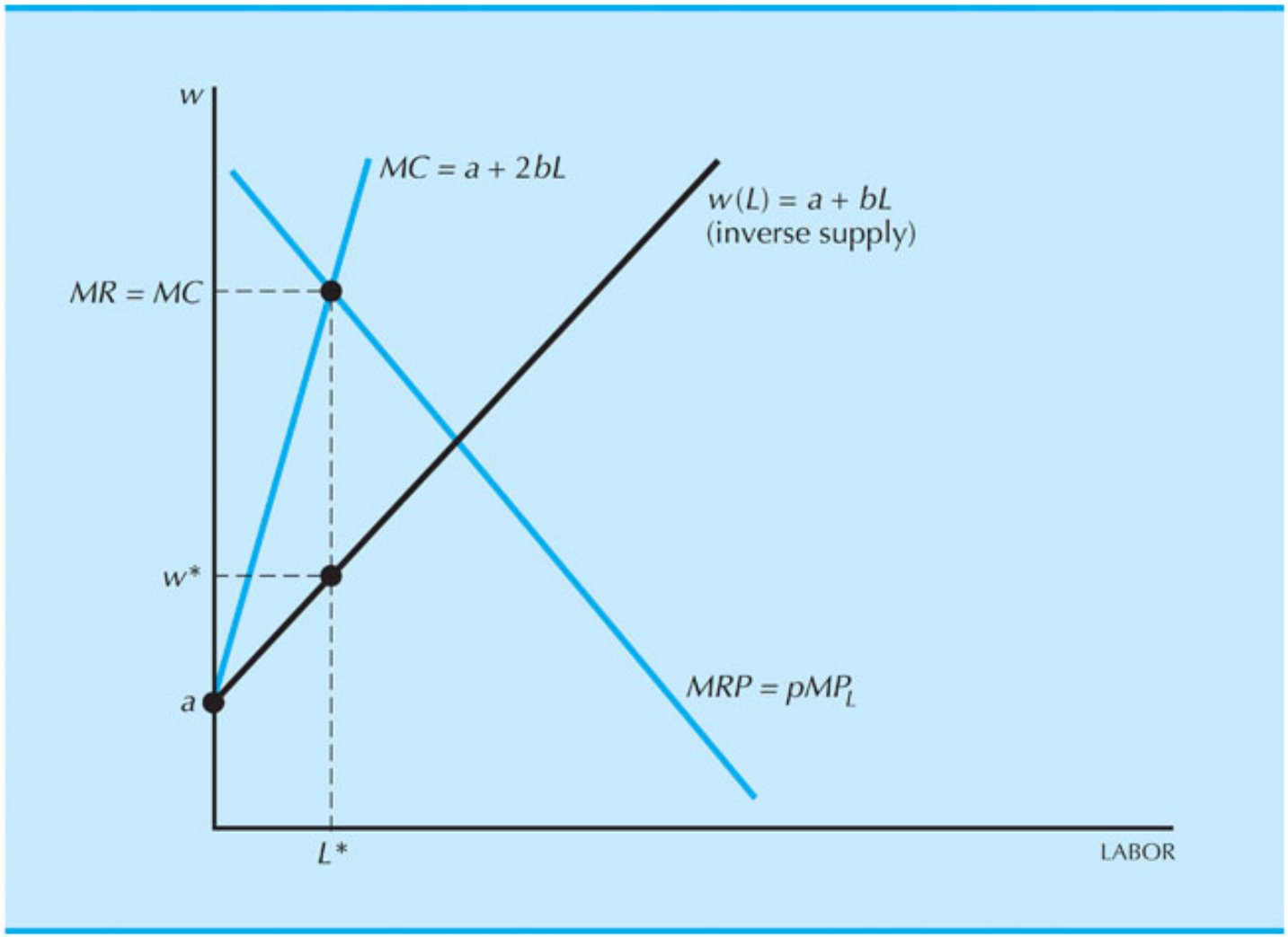

Figure 27.2

MONOPSONY

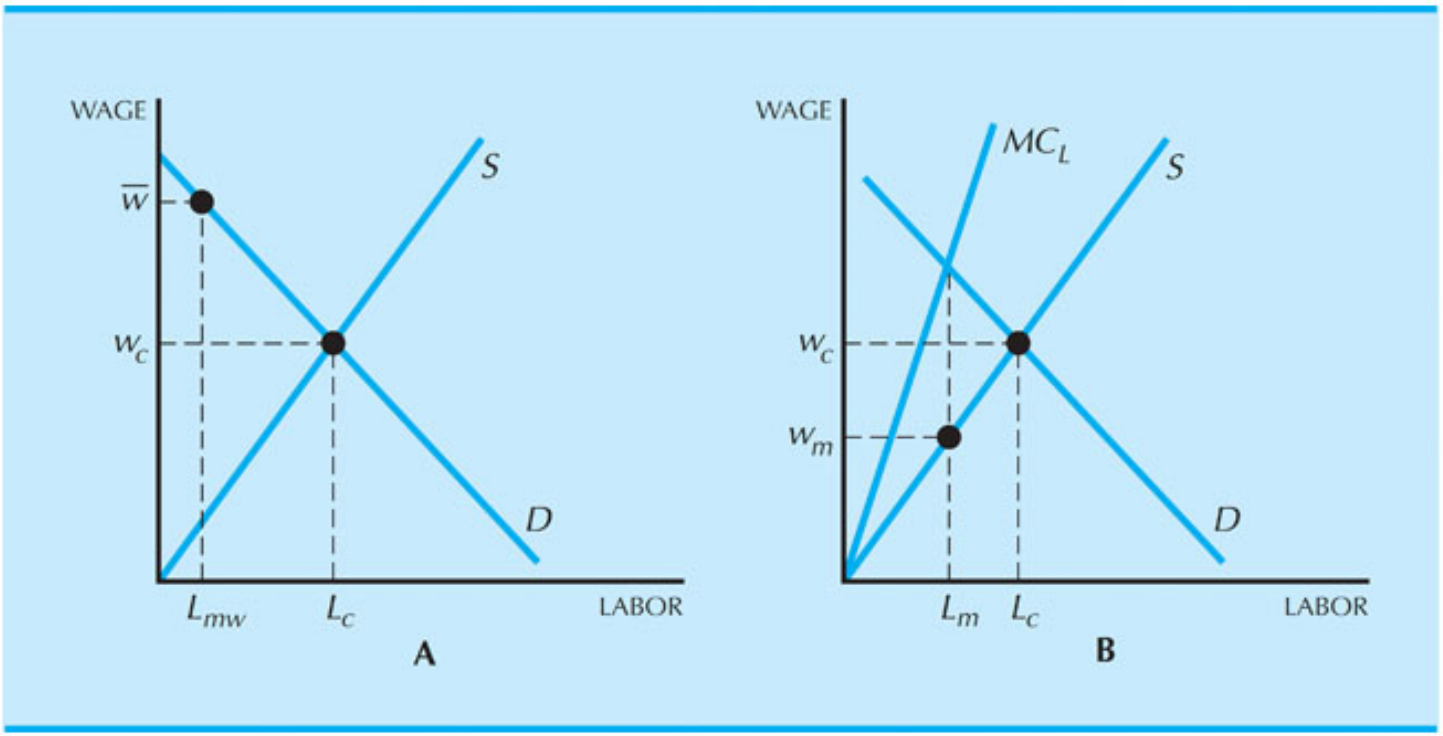

Figure 27.3