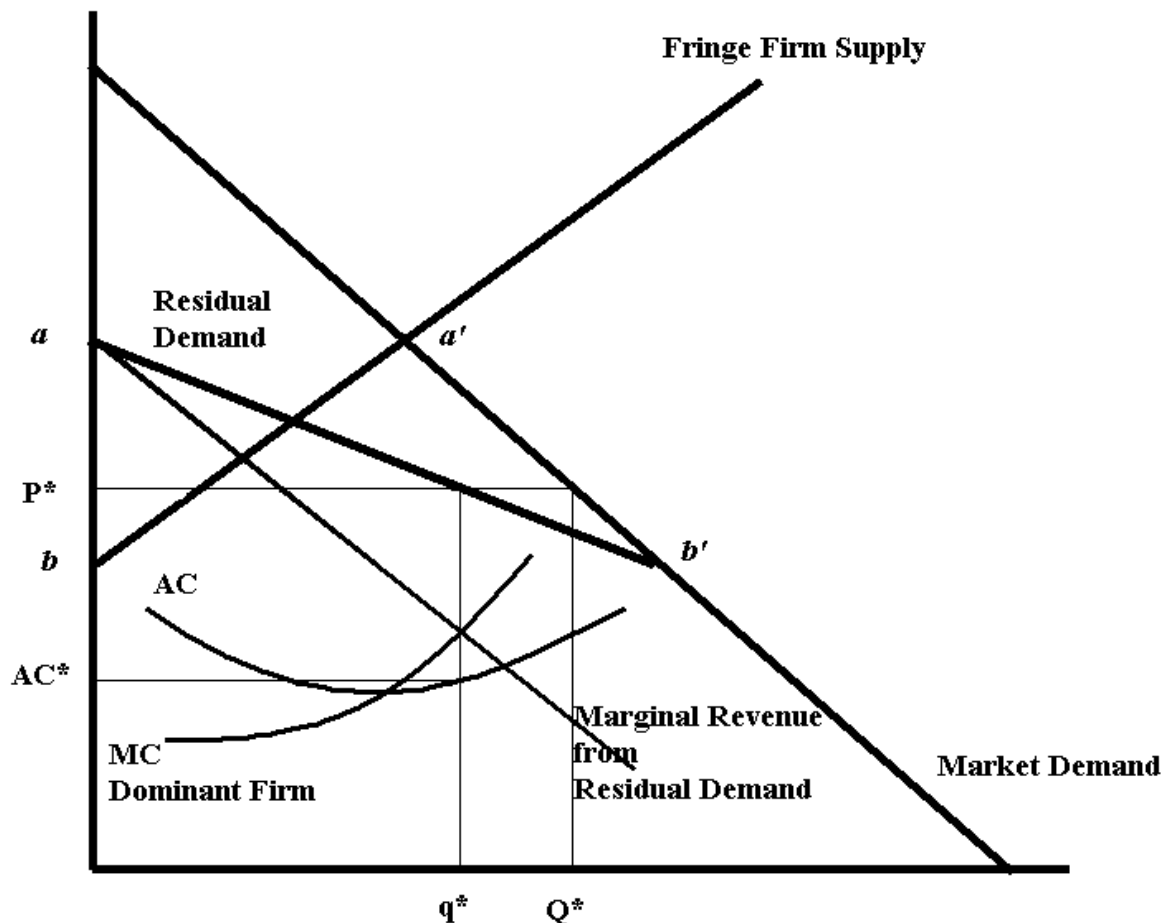


## Dominant Firm

Consider the following diagram. It is similar to that shown in your book as Figure 4.6.



Start with market demand and the supply by the fringe firm. In the absence of the dominant firm, this would constitute the market equilibrium, shown by  $a'$ . The supply by the fringe firm represents the amount that these firms will supply at each price. If the market price falls below  $b$ , these firms will supply no output.

Given the residual demand, the dominant firm, with cost  $\{AC, MC\}$ , faces a residual demand shown by the line  $a-b'$ . This residual demand is the difference at each price below  $a$  between the quantity demanded at that price and the quantity supplied by the fringe firms. At market prices below  $b$ , the fringe leaves the market.

There is a marginal revenue associated with the residual demand. With linear demands, this marginal revenue function is twice as steep as the residual demand.

The dominant firm produces where the marginal revenue of the residual demand intersects its marginal cost. This quantity is  $q^*$ . When the dominant firm produces the amount  $q^*$ , the fringe firms produce  $Q^* - q^*$ , market quantity is  $Q^*$ , and market price is  $P^*$ .

At this equilibrium, the dominant firm enjoys profits of  $[P^* - AC^*]q^*$ .

## Points for Reflection:

- 1) If we think of this model as characterizing the entry of Wal-Mart into the Clemson area, some but not all fringe firms leave the market.
- 2) Market price is lower.
- 3) Wal-Mart makes profit that results from its lower cost. The profits do not result from "predatory" behavior by Wal-Mart. It chooses its production level based on its cost and the size of the residual demand.
- 4) If its costs are low enough and the fringe small enough, it might produce below price  $b$  which would drive all fringe firms out of the market. (See this discussion in regard to figure 4.6 in the book). Even so, having driven all fringe firms from the market, Wal-Mart does not raise its prices. It sets its price based on marginal revenue and marginal cost.
- 5) We will discuss predatory behavior at some length in regard to the famous Standard Oil monopoly of John D. Rockefeller. For now, recognize that predatory behavior assumes that the dominant firm takes losses in the short run, by engaging in economic warfare, that are offset by excess profits in the long run. War is very, very rarely profitable. In the model presented here, the advantage of the dominant firm lies in its lower cost. If it has a cost advantage, why would it engage in economic warfare that entails losses for itself for any period of time when it can enjoy positive excess profits all the time anyway?
- 6) The fundamental question is, Why does Wal-Mart have a cost advantage? Generally, firms with lower costs are firms that enjoy the benefits of (a) volume effects and (b) productive research and development. Even so, this only begs the question of why these firms have such an experience while other firms are constrained by small size and unproductive R&D. I give two answers: Luck and superior organization.
- 7) To some people this answer may be like peeling an onion: not much there at the end. However, it does point out the fallacy of saying "Wal-Mart is dominant because it has the money to buy in large volume and to force vendors to give it favorable treatment." This is wrong. Wal-Mart is dominant, and its dominance is evidenced by its ability to buy in large volume and at favorable terms. However, the cause of its dominance is more deeply rooted. It can enjoy the lower cost of volume effects because it has the organizational structure to handle the size.