

# CM22C IMPERFECT COMPETITION

## (3/1/15)

1. As the name suggests monopolistic competition (also called imperfect competition) has features of both monopoly and competition. This is nice because it means that much of CM24B applies to CM24C and some of what you will learn in CM24C will carry over to CM24E.

2. Monopolistic competition is a market structure in which there are many firms (in monopoly there is only one), there are many substitutes some of which may be very close substitutes (there are no substitutes under monopoly), and there are low barriers to entry (in monopoly there is no entry or exit).

The feature that most defines monopolistic competition is that the firms differentiate their products by branding, and marketing, especially advertising and so there are costs that a monopolist or competitive firm will not bear – we will call these selling costs. Product differentiation means that the firm attempts to persuade consumers that the firm's product is different from, and better than, the products of its competitors.

3. Monopolistically competitive firms are the most common type of firm: Examples with the number of producers in 2013: audio and video equipment (521), Computers (1,870), Frozen foods (531), canned foods (661), book printers (690), men's and boy's clothing (1,362), sporting goods (2,477), fish and seafood processing (9731), jewelry (2,278), women's and girl's clothing (2,972).

4. Essentially each monopolistically competitive firm is a monopolist – I am the only producer of Sleeman burgers and you may not use the Sleeman burger name because I have copyrighted it. Therefore, each firm faces its own negatively sloped demand curve and sets its own price. Firms also compete in terms of quality and by advertising and they engage in extensive marketing. The firm wants to generate "brand loyalty" (lower the price elasticity of their product) so that you will only buy Sleeman burgers, never Big Macs or Wendy's crud.

5. Because each monopolistically competitive firm is a monopolist in its individual niche the short run monopolistic competition model is the same as the monopoly model, although their cost curves will be different because of the selling costs. (See Figure 1. The MC curve should rise very steeply once it crosses the minimum point on the AC curve.) The green rectangle is the firm's short run profit. ( $\Pi = (AR - AC) \times Q = (P - AC) \times Q$ ). Of course the firm may be making a loss at its profit maximizing output, since profit maximization is consistent with loss minimization.

6. The AC curve includes the firm's selling costs and so all costs are higher than under perfect competition.

7. Because a monopolist is an industry, whereas the monopolistically competitive firm is only one firm in an industry direct comparison of the two market forms is not possible.

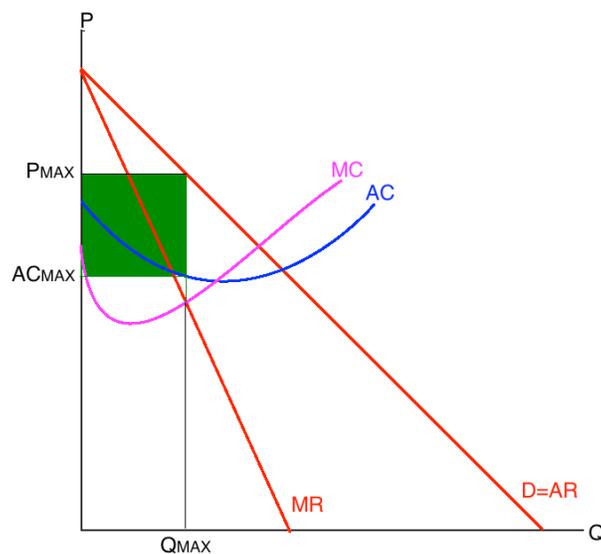


Figure 1

8. The competitive part of monopolistic completion derives from the fact that entry into the industry is relatively easy. In the long run firms will enter the industry so long as the existing firms are making a higher than normal profit ( $P > AC$  where AC includes a normal return on capital employed.) Similarly existing firms will exit in the long run if they do not make at least normal profits in the short run.

When firms enter the industry two things happen. First AC and MC will rise because there will be more firms competing for the scarce inputs. Second the firms' demand curves will pivot, becoming flatter because with more firms there

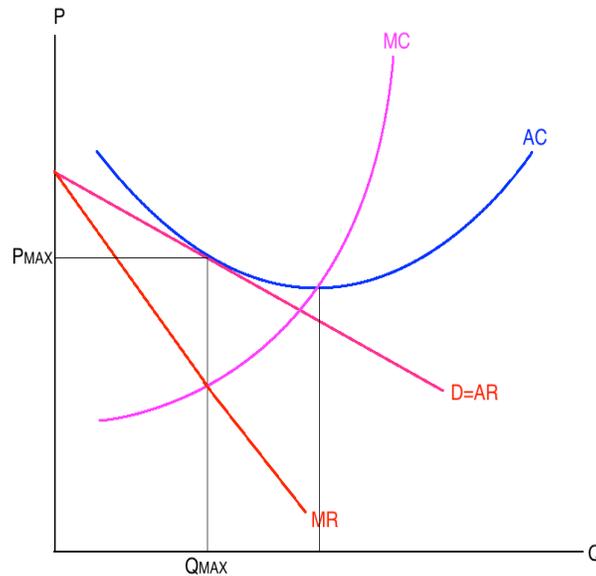


Figure 2

will be more substitutes. Both of these processes will continue until the firms are all making normal profits. This means that in the long run the demand curve must end up tangential to the AC curve (see Figure 2).

7. The AC curves in Figures 1 and 2 include selling costs – the costs of marketing and also the costs of improving existing products and developing new products. These costs are a fundamental feature of monopolistic competition.

8. Advertising has two functions; first it informs potential consumers of the existence of the good or service. In a world dominated by limited information this is an extremely desirable activity on the part of the firm and substantially lowers consumers' search costs. Secondly, advertising and marketing attempt to mold consumers preferences and to divert sales away from other firms. (See the discussion of consumerism in CM17.) If the products of the firms are essentially the same, only the packaging and advertising are different (generics versus branded goods), then this expenditure may be wasteful (value judgement). If the marketing persuades you to buy some "cure" for aging that does not work – I'll

let you know if I find one that does work – then the seller is exploiting asymmetric information and the market outcome is not socially optimal. Cigarettes were originally advertised as being good for your health, they helped to lower stress, and were given away to troops in WW1 causing many soldiers to become heavy smokers (although you never lit three cigarettes from one match in the trenches) and gave a huge boost to the cigarette industry and increased the revenues of advertising companies.

9. When you buy a pair of imported Nike running shoes for \$70 you are paying about \$9 for the raw materials, \$8 for manufacturing costs, a \$3 tariff on the imported shoes and \$50 in selling costs (of which only \$4 is spent on advertising). Selling costs include the costs of retailing which can amount to as much as 50% of the selling price. A major component of your textbook costs are the marketing costs of differentiating one textbook from another. (All of the costs of the Econ 206 Commentaries are borne by me in the form of hours in front of my computer when I could be doing other things.) Brand names are an important component of selling costs – if I printed the Commentaries then they would be photo-copied a term invented and popularized by the Xerox company who did not want their brand name to become a generic title.

10. There is no clear evidence as to whether selling expenses are beneficial or not. Each case would have to be examined on its own merits.

11. This is very much a toy model. In particular we have not taken into account any interaction between the firms and we have ignored the impact of the expansion (or contraction) of the industry on demand at the industry level. Technically our problem is to work out how to define the industry and how the demand of one firm relates to the price and quality and marketing strategy of other firms. To see how this is done you will probably need to study Econ 406! (1,100)

## WHAT YOU SHOULD KNOW

1. The characteristics of monopolistic competition. (2)

2. Short run price and output determination. (5)
3. Profits will be competed away in the long run as new firms enter the industry causing  $AC$  to rise and the demand curve to flatten until there is a tangency solution. (6)
4. Selling costs are an important feature of monopolistic competition. (7)