LECTURE 10: MONOPOLISTIC COMPETITION

Today’s Topics: Brands and Advertising


2. Monopolistic Competition: competition in the short run, in the long run; compared with perfect competition, and efficiency.

3. Advertising: pros and cons, as a signal of quality, brand names.
1. BETWEEN TWO POLES

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**Oligopoly**: a market structure in which only a few sellers offer similar or identical products. Often behave strategically. (Lecture 17.) Examples?

**Monopolistic Competition**: a market structure in which many firms sell products that are similar but not identical.
DIFFERENTIATED PRODUCTS
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HOMOGENEOUS

or
DIFFERENTIATED PRODUCTS

HOMOGENEOUS
or
DIFFERENTIATED?
DIFFERENTIATED PRODUCTS

HOMOGENEOUS

or

DIFFERENTIATED?

Degree of Substitutability?

Attributes:
DIFFERENTIATED PRODUCTS

HOMOGENEOUS
or
DIFFERENTIATED?

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HOMOGENEOUS
or
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Degree of Substitutability?

Attributes:
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- Subjective Image
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→ Monopolistic Competition

Examples?
CONDITIONS FOR MONOP. COMP.
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1. *Many sellers* competing by selling differentiated (such as branded) products.
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5. Buyers are price takers; *no bargaining.*
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2. Assume that each firm takes others’ actions constant & then sets sales \( y_{SR}^* \) so that
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   MR(y_{SR}^*) = MC(y_{SR}^*) \quad (SR = \text{Short Run})
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   \[
   \therefore \text{attractive for new firms to produce close substitutes in the long run.}\]
POSITIVE PROFITS

$/unit

output/period

MC

AC
POSITIVE PROFITS

\[ \text{\$/unit} \]

\[ \text{output/period} \]
POSITIVE PROFITS

\[ D = AR \]

\[ P_{SR} \]

\[ y_{SR} \]

\[ MC \]

\[ AC \]

\[ MR \]

$/\text{unit}

\text{output/period}
POSITIVE PROFITS

\[
\begin{align*}
\text{$/unit} & \quad P_{SR} \\
\text{output/period} & \quad y_{SR}
\end{align*}
\]

\[D = AR\]  \[D = AR'\]  \[MC\]  \[AC\]  \[MR\]
With demand $D$, profit attracts new entrants, which contracts the demand to $D'$. 
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Profit falls, but still positive: $AR'(y') = P' > AC(y')$. 
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\[ \therefore \text{the demand curve } D'' \text{ must be tangent to the } AC \text{ curve at the price & output chosen.} \]
ZERO PROFITS

$/unit

output/period

MC
AC
ZERO PROFITS

$/unit

output/period

\( D = AR \)
ZERO PROFITS

\[ D'' = AR'' \]

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$/unit

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$D'' = AR''$

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$MC$

$AC$

$P''$

$y''$
ZERO PROFITS

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There will be excess capacity: firms will not operate at minimum $AC$, and so they could reduce $AC$ by increasing output.
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Always eager to make another sale: an extra unit sold at the current price means more profit, not unwilling.
AND EFFICIENCY

Inefficient, but greater variety in the market.

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3. Too much or too little entry: individual entrant considers only its profit, \textit{but} consumers gain \textit{CS} with a new product, \textit{while} incumbents lose \textit{PS} with the new competitor.
3. ADVERTISING

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Electronic media: 33%
Rest: 17%
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Empirical results: Across 50 states: price of spectacles 20% lower when advertising allowed.
AS A SIGNAL OF QUALITY
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Is what the advert says important? Not much — just that it is expensive and paid for.
BRAND NAMES

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Rationality: irrational preference for brand names, or for good reason?
SUMMARY

1. Between monopoly and perfect competition lie most markets: oligopolies (few sellers) or monopolistic competition (many sellers).

2. Monopolistic Competition: Neither perfect competition, nor pure monopoly: many sellers and zero profit, but a price mark-up.

3. Many products → variety for consumers!

4. Advertising to increase sales. Justified or not?
APPENDIX

Under what conditions is it true that the slope of the $MR$ curve ($\frac{dMR}{dQ}$) is twice that of the $AR$ (i.e. demand) curve ($\frac{dP}{dQ}$)?

$$R = Q \cdot P(Q)$$

$$\therefore MR = \frac{dR}{dQ} = P(Q) + Q \frac{dP}{dQ} = P \cdot (1 + \frac{1}{\eta})$$.

The slope of the $MR$ curve is given by:

$$\frac{dMR}{dQ} = 2 \frac{dP}{dQ} + Q \frac{d^2P}{dQ^2}$$

So it is only true in general for linear demand curves, for which $\frac{d^2P}{dQ^2} = \frac{d}{dQ} \left( \frac{dP}{dQ} \right) = 0$, because their slopes are constant (but not, of course, their elasticities).