

The 'green box' How to draw diagrams accurately?

Instructions for Tutors:

1. Before working with your group practice the drawing of an accurate diagram to show a firm with the following outcomes. (This is one example and other outcomes could be selected.)
 - 1) maximum profit ($mr = mc$)
 - 2) with supernormal profit ($ar > ac$)
 - 3) and productive inefficiency. (mc not equal to ac at lowest point)
- 4) Now study the **5 tips** below to help you. Use the diagram below to identify these 3 key points in all diagrams for market power (in this case Monopolistic competition). Note that this diagram highlights the point of productive efficiency i.e. **$mc = ac$ at lowest point.**
- 5) When you have mastered it then ask your group to complete the Task Sheet on page 3.

5 tips on how to draw accurate diagrams firms in monopolistic, oligopoly and monopoly. These are firms with market power and have downward sloping demand curves. See Diagram below for assistance.

5 Tips...

E.G. Decide what you want to draw. For example draw a firm making supernormal (s/n) profits that is productively inefficient:

1. Draw AR and AC
2. Select a max profit quantity of output on the X axis
3. from this point highlight S/N profit where $AR > AC$ (= S/N profit). At this point decide if you want to draw the firm as inefficient or not. (As the firm is productively **INEfficient** then mark max profit on the x axis where AC is not at its lowest point e.g. to the left of the lowest point on AC)
4. Add in MC cutting AC (at lowest point)
5. Add in MR. It must match with where you have marked the profit maximising level of output (practice drawing this on a blank paper). Your diagram is perfectly accurate. You can now analyse the firm (it can be a monopoly or oligopoly or monopolistic firm) in terms of **supernormal profits and productive inefficiency.**

Note: remember for PC and monopolistic: $AC=AR$ in long run

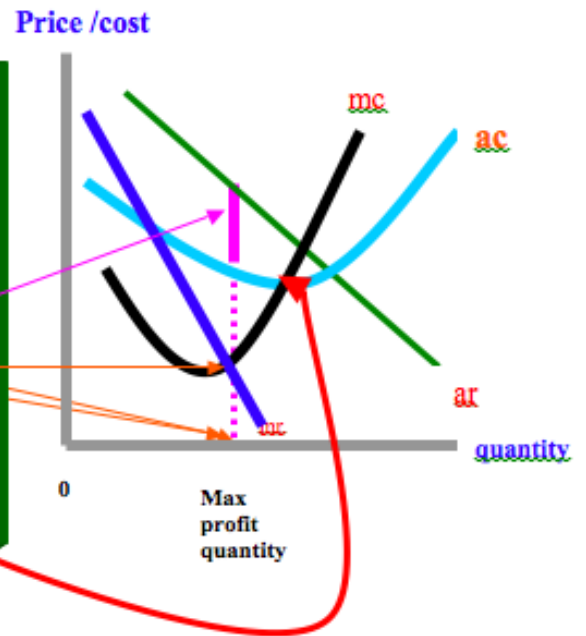
Note: For PC $ar = mr$ is drawn horizontal for PC as firm as no price power.

Figure 1: 3 Key points for every market power diagram

The Diagrams: How to draw them accurately?

Note to diagrams:
Look for the following points in order to analyse/evaluate each of the 4 types of competition:

1. S/N exists where $AR > AC$
2. Max profit at $MC = MR$
3. Efficiency at lowest point of AC



TASK SHEET

Approximate Duration **30 minutes**

Group Task Instructions: Peer tutors lead this exercise.

1. **(10 Minutes)** Without any assistance ask members of the group to draw a diagram for monopolistic competition showing a firm that is making supernormal profits and is productively inefficient (consider also allocative efficiency here and whether the model is good for society). Note carefully, the firm is a profit maximiser.
2. **(15 Minutes)** Explain the 5 steps to drawing the diagram accurately to show supernormal profit and inefficiency for a firm in monopolistic competition.
3. **(5 Minutes)** Then ask students to complete task 1 again. Note: this system can be used for different objectives e.g. efficiency, normal profit etc