Perfect Competition
Handout

Market structure refers to all characteristics of a market that influence the behavior of buyers and sellers when they come together to trade.

The keys factors in defining a market structure are:
   a. short run and long run objectives of buyers and sellers in the market
   b. beliefs of buyers and sellers about the ability of themselves and others to set prices
   c. degree of product differentiation
   d. technologies employed by agents in the market
   e. amount of information available to agents about the good and about each other
   f. degree of coordination or noncooperation agents may exhibit
   g. extent of entry and exit barriers.

A buyer or seller (agent) is said to be competitive if the agent assumes or believes that the market price is given and that the agent’s actions do not influence the market price. We sometimes say that a competitive agent is a price taker.

Assumptions of Perfect Competition

1. Buyers and sellers are competitive. In other words buyers and sellers are price takers.
2. All firms produce homogeneous (standardized) goods and consumers view them as identical.
3. All buyers and sellers have perfect information regarding the price and quality of the product.
4. Firms can enter and exit the industry quickly at any time without having to incur special expenses. Thus firms have freedom of entry and exit.
5. There are no transaction costs to participate in the market.
6. Each firm bears the full cost of its production process. That is, there are no externalities that the firm imposes on others. An externality is a by-product of a good or service that affects someone not immediately involved in the transaction.
7. There is perfect divisibility of output.

Comparative analysis of ten markets

Consider the twelve markets listed below. To what extent do they satisfy the conditions for perfect competition. In each case give reasons for your conclusion.

1. Market for fresh vegetables in Madison, WI
2. Market for seed corn in Iowa
3. Market for delivered pizza in Ames, IA
4. Market for baseball players
5. Market for unskilled farm labor in California
6. World market for wheat
7. Secondary market for treasury bills (3-month)
8. Market for combines in the United States
9. Market for sport utility vehicles
10. Market for live cattle in western Iowa
11. Market for running shoes
12. Market for gasoline in Waverly, IA
<table>
<thead>
<tr>
<th>y</th>
<th>FC</th>
<th>VC</th>
<th>C</th>
<th>AFC</th>
<th>AVC</th>
<th>ATC</th>
<th>MC</th>
<th>Demand/Price</th>
<th>TR</th>
<th>MR</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>200</td>
<td>0.00</td>
<td>200.00</td>
<td>200.00</td>
<td>64.00</td>
<td>264.00</td>
<td>64.00</td>
<td>184</td>
<td>184</td>
<td>-200.00</td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td>200</td>
<td>64.00</td>
<td>264.00</td>
<td>200.00</td>
<td>64.00</td>
<td>264.00</td>
<td>66.00</td>
<td>184</td>
<td>184</td>
<td>-80.00</td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td>200</td>
<td>130.00</td>
<td>330.00</td>
<td>100.00</td>
<td>65.00</td>
<td>165.00</td>
<td>74.00</td>
<td>184</td>
<td>184</td>
<td>38.00</td>
<td></td>
</tr>
<tr>
<td>3.00</td>
<td>200</td>
<td>204.00</td>
<td>404.00</td>
<td>66.67</td>
<td>68.00</td>
<td>134.67</td>
<td>88.00</td>
<td>184</td>
<td>184</td>
<td>148.00</td>
<td></td>
</tr>
<tr>
<td>4.00</td>
<td>200</td>
<td>292.00</td>
<td>492.00</td>
<td>50.00</td>
<td>73.00</td>
<td>123.00</td>
<td>108.00</td>
<td>184</td>
<td>184</td>
<td>244.00</td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>200</td>
<td>400.00</td>
<td>600.00</td>
<td>40.00</td>
<td>80.00</td>
<td>120.00</td>
<td>134.00</td>
<td>184</td>
<td>184</td>
<td>320.00</td>
<td></td>
</tr>
<tr>
<td>6.00</td>
<td>200</td>
<td>534.00</td>
<td>734.00</td>
<td>33.33</td>
<td>89.00</td>
<td>123.33</td>
<td>166.00</td>
<td>184</td>
<td>184</td>
<td>370.00</td>
<td></td>
</tr>
<tr>
<td>7.00</td>
<td>200</td>
<td>700.00</td>
<td>900.00</td>
<td>28.57</td>
<td>100.00</td>
<td>128.57</td>
<td>204.00</td>
<td>184</td>
<td>184</td>
<td>388.00</td>
<td></td>
</tr>
<tr>
<td>8.00</td>
<td>200</td>
<td>904.00</td>
<td>1104.00</td>
<td>25.00</td>
<td>113.00</td>
<td>138.00</td>
<td>248.00</td>
<td>184</td>
<td>184</td>
<td>368.00</td>
<td></td>
</tr>
<tr>
<td>9.00</td>
<td>200</td>
<td>1152.00</td>
<td>1352.00</td>
<td>22.22</td>
<td>128.00</td>
<td>150.22</td>
<td>298.00</td>
<td>184</td>
<td>184</td>
<td>190.00</td>
<td></td>
</tr>
<tr>
<td>10.00</td>
<td>200</td>
<td>1450.00</td>
<td>1650.00</td>
<td>20.00</td>
<td>145.00</td>
<td>165.00</td>
<td>354.00</td>
<td>184</td>
<td>184</td>
<td>184.00</td>
<td></td>
</tr>
<tr>
<td>11.00</td>
<td>200</td>
<td>1804.00</td>
<td>2004.00</td>
<td>18.18</td>
<td>164.00</td>
<td>182.18</td>
<td>416.00</td>
<td>184</td>
<td>184</td>
<td>190.00</td>
<td></td>
</tr>
<tr>
<td>12.00</td>
<td>200</td>
<td>2220.00</td>
<td>2420.00</td>
<td>16.67</td>
<td>185.00</td>
<td>201.67</td>
<td>521.00</td>
<td>184</td>
<td>184</td>
<td>184.00</td>
<td></td>
</tr>
<tr>
<td>13.00</td>
<td>200</td>
<td>3262.00</td>
<td>3462.00</td>
<td>14.29</td>
<td>233.00</td>
<td>247.29</td>
<td>681.00</td>
<td>184</td>
<td>184</td>
<td>184.00</td>
<td></td>
</tr>
<tr>
<td>14.00</td>
<td>200</td>
<td>4624.00</td>
<td>4824.00</td>
<td>12.50</td>
<td>289.00</td>
<td>301.50</td>
<td>184</td>
<td>184</td>
<td>184.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.00</td>
<td>200</td>
<td>4624.00</td>
<td>4824.00</td>
<td>12.50</td>
<td>289.00</td>
<td>301.50</td>
<td>184</td>
<td>184</td>
<td>184.00</td>
<td>-3272.00</td>
<td></td>
</tr>
</tbody>
</table>