Economics Essay

Structural features

Communication features

Essay Question:

Use a case study to examine how and why some companies collude with their rivals to set their prices for goods and services. Discuss what can go wrong in these types of 'mutually-beneficial' arrangements.

In an oligopoly, market price and market output depend on strategic decisions by firms within this market structure. These firms are pulled in two different directions: They either decide to compete against each other, making it a competitive market structure or they agree to collude and consequently form a monopoly. This essay will explain why firms are tempted to make a collusive agreement by pointing out factors supporting the emergence of collusion and incentives for firms. Giving a real world example of the **German Beer Cartel, it will investigate how firms reach and sustain such an agreement and why it might potentially break down**.

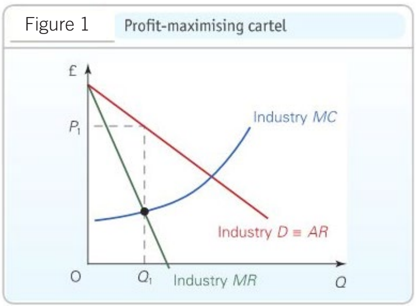
Case study introduced – a key element in the assignment

Strong thesis statement (see Chapter 1, Getting Started on Your Essay)

According to Sloman et. al (2013), **oligopoly is a market structure in which a large proportion of the industry is shared by a small number of firms**. However, it is difficult to make generalised assumptions about oligopoly as each industry can have different features: Some might have rather homogenous products such as chemicals or petrol whereas others produce differentiated goods like cars. Nevertheless, Sloman et. al (2013) point out that there are two key features of oligopoly. First, there are barriers to entry, which are very high and for some industries it is nearly impossible to enter. Second, the firms in an oligopoly are interdependent. This 'mutual interdependence' illustrates the fact that due to the small number of companies in the market, a decision made by one company affects its rivals immediately. These decisions can be changes in price, product specification, advertising or sales (Sloman et. al, 2013). Therefore, strategic decision-making by predicting other firms' behaviour is essential in order to succeed in the industry. These strategic decisions and the interdependence on other firms in the market encourage firms to collude in order to increase profits by increasing costs and decreasing output and thus acting as a monopoly. It is important to notice that there are two forms of collusion: Tacit (implicit) and overt (explicit) collusion. In my essay, however, I

Writer introduces context information relevant to the thesis statement will only focus on overt collusion, as this is a 'formal collusive agreement'.

Collusion means to 'agree on prices, market share, advertising expenditure, etc.' (Sloman et al., 2013, p.181). This can happen both implicitly, when for example firms adjust their prices in respect to the price of the market leader, and explicitly as a formal collusive agreement called a cartel. In a cartel all members act 'as if they were a single firm' (Sloman et al., 2013, p.181), so they create a monopoly: They restrict output, increase prices and can earn maximum profits (Worthington & Britton, 2005).



Source: Sloman, J. & Hinde, K. & Garratt, D., 2013, Economics for Business, 6th ed, p.181. London: Pearson.

Writer introduces further context information, relevant to the thesis statement and defines key terms

Accurate and effective use of figures – with reference, analysis & comment, supported by additional sources (see Chapter 2, Getting Started on Your Lab Report)

Present simple tense used to describe figures, tables, and charts

Figure 1 shows the effect collusion has on the market. The green marginal revenue curve (MR) is derived from the red market demand curve (D). The industry marginal cost (MC) can be found by adding up the marginal costs of all firms within the collusive agreement. Hence, the profit maximising output is where marginal cost is equal to marginal revenue, which is Q1 in Figure 1. At this quantity, due to the demand curve, consumers are willing to pay even more than just the marginal cost, which is why price P_1 can be charged. Thus there is an overall profit for all firms in the cartel of P_1 minus the marginal cost at this quantity. The firms in the cartel then have to decide about how to 'divide the market between them' (Sloman et al., 2013, p.181), meaning how to divide the output Q1, and thus the profit, between the different members of the cartel.

Apart from charging higher prices, firms can also collude by controlling output or by restricting their aggression towards others on non-price or quantity variables (Levenstein & Suslow, 2006). The abnormal profits are not the only reason why firms are tempted to collude, but collusion also reduces the uncertainty that firms face in an oligopoly due to the mutual interdependence.

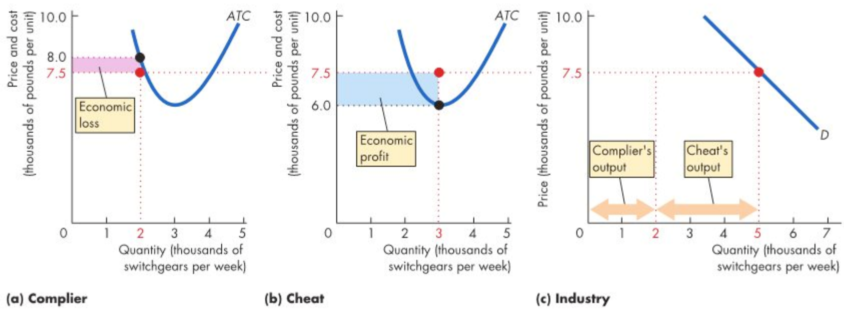
There are a number of factors that favour the emergence of collusion. As Sloman et al. (2013, p. 183) point out, collusion is favoured when there are only a small number of firms in the oligopoly, and thus industry concentration is higher, which have 'similar production methods and average costs' so that they can 'easily reach agreements on price'. When there is one dominant firm it is very likely that this firm can set the price. Collusion is also more likely to occur when there are significant barriers to entry, there is market stability and there are no government measures that can prevent it. The last point however is rarely going to happen as governments always try to avoid collusion. In many countries cartels are illegal because they drive prices and profits up, which is 'against the public interest' (Sloman et al., 2013, p.181).

However, in collusion there is always an incentive to cheat. In order to explain **'cheating'**, we assume that there is a duopoly, an oligopoly with only two firms. Both firms have agreed on a certain level of output when forming the cartel and as pointed out previously, the prices that they charge are greater than their marginal costs. Figure 2 illustrates what might happen if one firm cheats on the other firm.

Writer introduces key issue, relevant to the thesis statement, supported by sources

Figure 2

One Firm Cheats



Source: Parkin, M. & Powell, M. & Matthews, K., 2008, Economics, 7th ed, p.304, London: Pearson

As Parkin et al. (2008) state, one firm might persuade the other firm of the fact that demand has decreased and thus prices need to be cut, in order to be able to sell all units produced. This however is not the case, but the firm that is cheating was only planning to increase output, which would have led to lower prices. In Figure 2, the complier, the firm that carries out the agreement, continues to produce the set quantity but at a lower price, thus does not cover its average total costs any more and consequently makes economic loss. The cheating firm however has lower average total costs as it produces more output than the complier and thus makes an economic profit. So if one member of the cartel produces more than the agreed quota, this firms' profitability would be increased, but only 'at the expense of the other member of the cartel' (Worthington & Britton, 2005, p.225). Parkin et al. (2008) make clear that if one member of the cartel cheats, this leads to greater industry output and lower industry price, however the profit is not equally distributed.

Assuming that both firms start cheating, prices will go down successively up to the point where price equals marginal cost and zero economic profit is made, which means that a perfectly competitive outcome is achieved (Parkin et al., 2008).

Levenstein and Suslow (2006, p.43) attempted to investigate the role of cheating on cartel success and found that, apart from cheating and a lack of effective monitoring, one is one of the main reasons why cartels break down is that they sometimes cannot adjust 'in response to changing economic conditions'. Therefore, Levenstein and Suslow (2006) point out the three key challenges that a cartel faces, which are, first to select and coordinate how the members of the cartel behave and then agreeing on a strategy, second to control the behaviour of the participants and find imperfections and third, the prevention of entry or expansion by non-cartel firms'. In the same paper, they suggest how to overcome these difficulties. One essential point is to collect information and thus detect firms that are cheating. Those firms can then be punished by methods that the cartel members agreed on when making the collusive agreement. . They state that by 'structuring incentives' (p.67), collusion should become more profitable than cheating, which means that penalties exceed the profit that could possibly be made from cheating. Also, Levenstein and Suslow (2006) point out that if demand increases, the incentive to cheat increases as well, so it is important that the cartel price is adjusted constantly.

Further in-depth analysis of the issue of cheating in cartels, supported by sources

As Pindyck and Rubinfeld (2005, p. 463) state there are 'two conditions for cartel success'. These are the formation of a stable cartel organisation in order to overcome the problems associated with price agreements and penalties for cheating, and the potential for monopoly power. This means that the demand curve should be rather inelastic so that 'the potential gains from cooperation are large' and consequently 'cartel members will have more incentive to solve their organisational problems'.

Only just recently, Germany's anti-trust authority fined five major beer breweries, as they were involved in the **German Beer Cartel**, which is said to be the biggest cartel in the history of German Beer.

Writer uses case study to illustrate and further explain the issue and support the thesis

Between 2006 and 2008, six German Beer breweries agreed on which prices to charge for draught as well as bottled beer. The agreements were mainly based upon personal and phone contact between the leaders of the involved companies, who regularly got together for official meetings like fairs and other debates (SpiegelOnline, 2014). According to the Bundeskartellamt (2014), the German Federal Cartel Authority, the agreed increase in price for draught beer was five to seven euros per hectolitre. For a beer crate of twenty bottles there has been an increase in the price of one euro. As the newspaper Focus (2014) points out, the six big companies agreed on these prices first and then passed it on to more regional companies, which consequently adjusted their prices. By charging higher prices than their marginal cost of producing beer, the breweries made abnormal profits, which were then split between them. Considering some of the most popular events in Germany like the Oktoberfest or the German Carnival, the demand for beer is really high and the consumers could not escape the high prices as a large share of the market was involved in the collusion.

Except for one company in the group, who reported the cartel and thus escaped a fine, the other five major breweries had to pay a fine of 106.5 million euros (Bodoni, 2014). Also, according to Bodoni (2014) 'the companies had their penalties reduced for cooperating with the probe', although the cost of this collusive agreement for the consumers accounts for 432 million euros per year (Salzburger Nachrichten, 2014).

So the main reason why this cartel was reached and sustained was for the firms to increase profits over a long period of time. Surprisingly, the cartel did not break down due to cheating or other challenges that a cartel faces, which were previously pointed out, but because one of the members reported the cartel in order to escape a fine in case it would have been discovered in a different way.

This essay has critically assessed the main reasons, why firms are tempted to agree to a collusive agreement. Due to the strategic decision making, which is a major feature of oligopoly, firms are tempted to collude and act like a monopoly in order to increase profits. However, it is important to realise that collusion is illegal in most countries, so cartels face a number of challenges such as cheating that might potentially lead to the break down of the cartel. **Although there are strict penalties for forming cartels, collusion occurs in many different industries and might sometimes not be detected for a long time. The German Beer Cartel however shows the serious punishment that firms within a cartel face once it has been detected, so it**

Based on the evidence presented, analysed, and evaluated the writer's conclusion is justified. See Chapter 1, Getting Started on Your Essay

is advisable for firms to really consider all the consequences before agreeing to join a collusive agreement, as it is not safe haven for them at all.

References:

Harvard Referencing system (see Chapter 8, Referencing with Accuracy)

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Diana and Tom's Comment:

The essay is thoroughly researched and the writer makes effective use of sources to identify, analyse and critically evaluate key issues. There is a clear thesis statement and purpose presented. He/she has produced an easy to follow structure with good links and flow between paragraphs. There is a strong line of reasoning, and a sense of development. While the case study section may be a little short, there is substantive evidence presented, and the case acts as a relevant example to support the writer's thesis. Based on the analysis and evaluation presented, the writer's final conclusions are justified.

Note: For the purposes of this publication, the names of the beer companies have been removed.