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Regulating Monopolies - A Case Example of Google

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Abstract

Monopolies can have a great impact on economic efficiency and therefore on the market. Thus, states try to avoid either the existence of monopolies or their impacts on the markets. This case study aims at a real case of Google, that has been sued by the European Union for its unlawful behavior. It is important to understand, how monopolies work and how the antitrust laws of the European Commission prevent negative impacts on markets and economies. This paper first explains the foundations of monopolies and how their impacts can be reduced or completely prevented, followed by a definition of the antitrust laws of the European Commission. This paper concludes with an investigation of the European Commission against Google. For this purpose, the details of the case are explained and possible effects are outlined. The conclusion of this paper is that legal action against Google is a viable option, but it is not possible to conclusively evaluate how other solution alternatives would have affected Google's behavior.

Key Words

Monopolies, Governmental Regulation, Google, European Union, Antitrust, Monopoly Regulation

Introduction

Big tech companies like Amazon, Facebook or Google appeared in the news recently for the antitrust cases, the United States government filed against them.¹ But not only the United States took a closer look at the market behavior of big tech companies, the European Commission filed a case against Google as well.² While tech companies have not been in focus of antitrust cases in the past very often, the European Union intensifies the monitoring of anticompetitive behavior.³

¹ Cf. Schuetz, M. (2019)

² Cf. Vincent, J. (2019)

³ Cf. Toplensky, R. (2019)

Regulating Monopolies – A Case Example of Google

A monopoly changes the economic efficiency and has an impact on the market. Different options for regulations exist, all with their specific advantages and disadvantages, there is not one best option to regulate a monopolistic supplier in a market. The European Commission watches market participants on whether they provide fair chances for competitions. The objective of this paper is to define monopoly and how a monopoly influences the market and economic output and how a monopoly can be regulated. Additionally, this work will show a case by the European Commission against the tech company Google to build a connection between the theoretical foundations of regulation and the antitrust efforts of the European Union, by describing potential outcomes of the cases.

This paper will start by describing the basics of monopoly regulation by first defining the term monopoly and explaining how a monopoly works and what impact on the market the existence of a monopoly has, followed by possibilities to regulate a monopoly. Subsequently, an antitrust case filed by the European Commission within the European Union against Google will be exemplified. Lastly, the merits of the antitrust case against Google will be discussed by tying together the theoretical foundations and the practical case details.

The glossary of Industrial Organization Economics and Competition Law defines monopoly as following:

“Monopoly is a situation where there is a single seller in the market. In conventional economic analysis, the monopoly case is taken as the polar opposite of perfect competition. By definition, the demand curve facing the monopolist is the industry demand curve which is downward sloping. Thus, the monopolist has significant power over the price it charges, i.e. is a price setter rather than a price taker.”⁴

While the term monopoly refers to the actual numbers of sellers, a natural monopoly does not necessarily require only a single seller or producer in the market. It rather describes a situation, where the entire demand within a market can be satisfied by a single seller at lowest cost. No other firms are needed to fulfill the requirements and needs of the market. If there are other companies, they will be quickly either merged or will fail as the market demand will be satisfied by the company with the lowest cost in this natural monopoly.⁵

Although it may seem like monopolies may have great power, one needs to distinguish between monopoly power and economic power. The term monopoly power refers to the ability of companies to set their price as high or low as they want to without losing too much

⁴ Khemani, R. S. / Shapiro, D. M. (2003)

⁵ Cf. Posner, R. A. (1999) Natural Monopoly and its Regulation, p. 1

profitability. This might be the case where no other supplier can fulfill the market demand or where simply no other supplier exists. In highly competitive markets, a single company usually does not have extraordinary monopoly power. The term economic power refers to the maximum potential profit of a company. If a company charges the particular price that maximizes short-run profits, the actual profit and economic power are equivalent. If a company does not charge this price, economic power is simply the potential of the company. There might be situations where the monopoly power and economic power coincide, but it is not synonymous. Karier names as an example the monopoly power of a remote gas station or a small-town newspaper, which might be high, but they both not necessarily have high economic power regarding their potential profit.⁶

In theory, the price level with the highest fairness to customers and to increase the welfare the most, is a price that is equal to the marginal cost. In practice this is not possible for a monopolistic supplier, as there are fix costs, e.g. for the production facilities. The Ramsey pricing aims for a price level, that covers all costs for the monopolistic supplier and maximizes the social welfare. A basic fundament of the Ramsey pricing is the inverse elasticity rule. It implies, that the mark-up on prices is proportionate to the inverse of the price elasticity of demand.⁷ In other words: The more sensible consumers react on price differences, the lower the mark-up will be and vice versa.

Mirman et al. describe the Ramsey pricing as a possibility for a Monopoly to exist without the need of governments or outside organizations to interfere. Ramsey prices can be sustainable under certain conditions.⁸ Understanding this, one could argue, that the Ramsey pricing is a possibility for the existence of a monopoly without losses in social welfare. Other scientific literature suggests that Ramsey prices are not always the best way to increase social welfare while maintaining profitability of firms. Governments therefore sometimes limit the possibility to use the Ramsey pricing method in certain cases.⁹

As mentioned before, a monopoly does not always have interest in a maximum of welfare and consumer surplus. Loeb and Magat propose some measures for that, so that monopolies get an incentive for maximizing the consumer surplus.¹⁰ The Loeb-Magat proposal consists of two parts and relies on three basic assumptions, which are as following:

- The company knows its cost structure, but it is not observable for everyone, e.g. the regulator

⁶ Cf. Karier, T. M. (2016) Beyond Competition, p. 4 f.

⁷ Cf. Höffler, F. (2004) Monopoly Prices versus Ramsey-Boiteux Prices, p. 1 ff.

⁸ Cf. Mirman, L. J. et al. (1986) Ramsey prices, average cost prices and price sustainability, p. 1 f.

⁹ Cf. Sheehan, M. (1991) Why Ramsey Pricing is Wrong, p. 1 ff.

¹⁰ Cf. Sharkey, W. W. (1979) A Decentralized Method for Utility Regulation, p. 405

- The demand curve can be observed by the company and the regulator
- The company wants to maximize profits¹¹

The first part of the proposal is a subsidy for the monopolistic supplier with an amount equal to the customer surplus at the chosen price. This will lead to a cost-saving behavior and a chosen price equal to the marginal costs of production. The second part of the proposal includes a subsidy scheme in combination with franchise bidding or a lump-sum tax. With this, there will be either a form of competition if other companies compete in the franchise auction of the regulator will get some of the subsidies back with the tax while maintaining the maximization of the consumer surplus.¹²

Harrison and McKee name the size of the subsidy required as one major weakness of the Loeb-Magat proposal. Another option besides the already mentioned possibility of selling a franchise is allowing the marketing to be directly contestable by a few competitors with zero entry costs. Their studies show, that both versions do have their own advantages and disadvantages.¹³

The Loeb-Magat proposal is one form of monopoly regulation by giving incentives to set prices differently to what the monopolistic supplier would do without subsidies. Besides that, there are different ways how monopolies can be regulated. Koch names the four examples of state ownership, price control, public-private partnerships and enforcing antitrust laws.¹⁴

Besides those regulatory options, Posner names the regulation of rate structure and market entry as an effective option to avoid monopolist structures in an industry. Governments will forbid unfair and discriminatory rates and regulate the entry of companies by making certificates necessary to sell certain goods. He further mentions, that both rate structure and market entry should be discussed together, as they are highly interdependent.¹⁵

The main industries where monopolistic structures can arise and regulations should be considered, are television, telephone, water, natural gas, electricity and railroad transportation. This does not mean that other industries are completely safe from inefficiencies due to a monopolistic supplier, but the afore mentioned industries are often seen to be regulated in many countries. There is not one single option to regulate monopolies as shown before, and countries choose different options in similar situations.¹⁶

¹¹ Cf. Lisbon School of Economics & Management

¹² Cf. Sharkey, W. W. (1979) A Decentralized Method for Utility Regulation, p. 405

¹³ Cf. Harrison, G. W. / McKee, M. (1985) Monopoly Behavior, p. 52 f.

¹⁴ Cf. Koch, M. (2018) Microeconomics, p. 54 f.

¹⁵ Cf. Posner, R. A. (1999) Natural Monopoly and its Regulation, p. 70

¹⁶ Cf. Sherman, R. (1989) The regulation of monopoly, p. 3 f.

Now that different options for regulating monopolies have been explained, it is clear, that different regulation options might have different outcomes. In the end acting is better than doing nothing, but depending on the specific industry and market situation, the evaluation of more than one regulation option can be useful or even necessary.

The Treaty on the Functioning of the European Union consists of two articles, in which the antitrust laws are covered: Article 101 and article 102. Additionally, every member state may have their own antitrust laws. Competition law in its whole does not only consist of article 101 und 102, but also includes state aid and merger control. As the European Commission often uses the term antitrust as a subcategory of competition law and refers to article 101 und 102, those two articles will be the fundament of the following explanations regarding antitrust laws in the European Union and the cases against Google.¹⁷

The European Commission summarizes the contents of articles 101 and 102 as following:

"First, Article 101 of the Treaty prohibits agreements between two or more independent market operators which restrict competition. This provision covers both horizontal agreements (between actual or potential competitors operating at the same level of the supply chain) and vertical agreements (between firms operating at different levels, i.e. agreement between a manufacturer and its distributor). Only limited exceptions are provided for in the general prohibition. The most flagrant example of illegal conduct infringing Article 101 is the creation of a cartel between competitors, which may involve price-fixing and/or market sharing.

Second, Article 102 of the Treaty prohibits firms that hold a dominant position on a given market to abuse that position, for example by charging unfair prices, by limiting production, or by refusing to innovate to the prejudice of consumers."¹⁸

Google has been accused of breaching the competition law, which will be examined further in the following section. Google was founded by two Stanford University students, Larry Page and Sergey Brin. The company launched in 1998 and since then grew to over 12.000 employees worldwide.¹⁹ Googles mission is "to organize the world's information and make it universally accessible and useful"²⁰. In 2018 Google generated over 116 billion US Dollar from advertising revenues, which is the main revenue stream.²¹

¹⁷ Cf. Vande Walle, S. (2013) Private antitrust litigation in the European Union and Japan, p. 28 f.

¹⁸ European Commission (2014)

¹⁹ Cf. Schneider, L. (2019)

²⁰ Google

²¹ Cf. Cuofano, G. (2019)

Although Google claims, it does not have great market power, some countries file cases against Google because of market power abuse.²² So did the European Commission within the European Union and fined Google 1.49 billion Euro for abusive practices in online advertising.²³ The details about this case will now be explained further with chronologically details about the investigation.

The European Commission states in one of its press releases, that Google has a market share of around 80% in the last ten years in search advertising intermediation.²⁴ Tying this back to the theoretical foundations explained in chapter 2, the European Commission probably sees market power as well as economic power and therefore the necessity to investigate and, if ultimately required, regulate or penalize Google's behavior. The discussed possibilities to regulate monopolies were mainly for price settings, so at this point it is important to take a closer look at the regulation options the European Commission thought about.

Google was in focus of the European Commission not only for its potential abuse of market power regarding online advertising, but also because of systematically favoring its own comparison-shopping product in the general search results page. The European Commission sent out a Statement of Objections for this, too.²⁵ Regarding the scope of this paper, the separate investigation regarding Google's comparison-shopping service will not be examined any further, but instead the case about market power abuse in online advertising will be analyzed in more detail.

In 2006, Google started to include exclusivity clauses in its contracts. That means, that publishers of Google's AdSense must not place advertisements from Google's competitors on their websites. From March 2009 on, Google started to replace this exclusivity clause with premium placement clauses. Publishers were now forced to reserve the most profitable space on their website for advertisements of Google and had to request a minimum number of advertisements. Publishers were also forced to inform Google and ask for written permission, as soon as they wanted to change the way how advertisements were placed on their site. The European Commission called this an exclusive supply obligation, when competitors were completely left out of the market due to exclusivity clauses and a related exclusivity strategy, when the most profitable space on the website had to be reserved for Google advertisements.

²² Cf. Mason, M. (2019)

²³ Cf. European Commission (3/20/2019)

²⁴ Cf. European Commission (7/14/2016)

²⁵ Cf. European Commission (4/15/2015)

The European Commission highlights in its press release, that market dominance alone is not illegal, but dominant companies have a special responsibility in the market, as they must not abuse their power to restrict competition. Therefore, the European Commission has made the following judgement:²⁶

"Google has abused this market dominance by preventing rivals from competing in the online search advertising intermediation market."²⁷

Based on a broad range of evidence, the Commission found that Google's conduct harmed competition and consumers, and stifled innovation. Google's rivals were unable to grow and offer alternative online search advertising intermediation services to those of Google. As a result, owners of websites had limited options for monetizing space on these websites and were forced to rely almost solely on Google.

Following this judgement, the European Commission fined Google 1.49 billion euros, equaling 1.29% of Google's turnover in 2018. Google ceased his illegal practices after the Statement of Objections from 2016 and is required to refrain from any similar behavior in the future.²⁸

Now it must be reviewed, which possible regulation alternatives exist and might be useful in this situation, to regulate Google's abuse of market power. The Loeb-Magat-Proposal and Ramsey pricing both aimed at setting prices at a certain level or providing companies with incentives, to set their prices at certain levels. As Google does not create inefficiencies due to unbalanced prices, both the Loeb-Magat-Proposal and Ramsey pricing do not provide any regulatory support in this case. The four other options explained in the theoretical foundations were State ownership, price control, public-private partnerships and enforcing antitrust laws.

Price control as the second option is not a valid alternative as just explained. Therefore, the three options state ownership, public-private partnerships and enforcing antitrust laws remain. A state ownership would require either a regular market transaction by any European government to buy Google or an expropriation. Both possibilities pose major challenges, as several aspects have to be taken into account during nationalization. On the one hand, only a few states are likely to raise the funds to acquire a majority stake in Google. On the other hand, the expropriation of Google represents a decisive intervention in the free market economy and cannot be considered from a legal point of view in the context of this work. Nonetheless, with regard to the benefits of this type of regulation, it should be

²⁶ Cf. European Commission (3/20/2019)

²⁷ Cf. European Commission (3/20/2019)

²⁸ Cf. European Commission (3/20/2019)

noted that illegal online advertising practices could be resolved by nationalizing Google. However, due to the far-reaching impact on the free market economy, Google's customer base and perception within and outside the European Union, nationalizing Google does not seem to be an appropriate way to deal with this situation.

A public-private partnership is mainly for situations, where companies need a kind of subsidy or for example when a state tries to accelerate the construction of a large infrastructure. Both are not necessary in the case of Google. Nevertheless, a public-private partnership could prevent Google from using illegal practices if Google were controlled by government bodies. However, a pure partnership between Google as a private company and an EU member state would not ensure that Google's business practices are controlled, and market power abuse could not be prevented. Therefore, the public-private partnership cannot be considered a suitable regulation option in this situation.

Enforcing antitrust laws was the option, the European Commission went for. In the case of Google, it appears to be the most promising way to prevent illegal business practices. The European Commission cannot directly influence the conduct of Google or similar companies as would be the case, for example, with nationalization. By enforcing antitrust laws, the European Commission can impose significant sanctions and thus intervene in the market in a regulatory way that would not be possible without sanctions. The difficulty here is to find an appropriate level. Penalties that are too favorable have no effect on the financial resources, while penalties that are too high may have a substantial impact on the health of the company in question. It is therefore extremely important to give detailed consideration in advance to the possible effects of a fine and to consider what other sanctioning options exist. A major disadvantage of this method is that penalties are only imposed retrospectively when the illegal practices have already been used. Depending on the level of the penalty, the company is then instructed to examine future business practices more closely. Ultimately, however, market power abuse cannot be prevented in every case.

In summary, it can be said that there is no perfect method of regulation in the case of Google's market power abuse. The sanctions chosen by the European Commission may look promising for the future, although they do not revise the illegal practices of the past. Similar cases at Google or any other company, however, need to be reconsidered time and again due to the extensive impact of regulation or punishment.

Publication Bibliography

- Harrison, G. W. / McKee, M. (1985) Monopoly Behavior, Decentralized Regulation, and Contestable Markets: An Experimental Evaluation. In *The RAND Journal of Economics* 16 (1), p. 51.
- Höffler, F. (2004) Monopoly Prices versus Ramsey-Boiteux Prices: Are they "similar", and: Does it matter? Max Planck Institute for Research on Collective Goods.
- Karier, T. M. (2016) Beyond competition. Economics of mergers and monopoly power. London: Routledge.
- Koch, M. (2018) Microeconomics – Individual Choices and Tradeoffs.
- Mirman, L. J. et al. (1986) Ramsey prices, average cost prices and price sustainability. In *International Journal of Industrial Organization* 4 (2), pp. 123–140.
- Posner, R. A. (1999) Natural Monopoly and its Regulation. Washington: Cato Institute.
- Sharkey, W. W. (1979) A Decentralized Method for Utility Regulation: A Comment. In *The Journal of Law and Economics* 22 (2), pp. 405–407.
- Sheehan, M. (1991) Why Ramsey Pricing Is Wrong: The Case of Telecommunications Regulation. In *Journal of Economic Issues* 25 (1), pp. 21–32.
- Sherman, R. (1989) The regulation of monopoly. Cambridge: Cambridge University Press.
- Vande Walle, S. (2013) Private antitrust litigation in the European Union and Japan. A comparative perspective. Antwerpen: Maklu.

Internet Sources (checked 09-2020)

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|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cuofano, G. | (2019) Google Mission Statement and Vision Statement In A Nutshell. Available online at https://fourweekmba.com/google-vision-statement-mission-statement/ |
| European Commission | (2014) Antitrust. Overview. Available online at https://ec.europa.eu/competition/antitrust/overview_en.html |
| European Commission | (4/15/2015) Antitrust: Commission sends Statement of Objections to Google on comparison shopping service; opens separate formal investigation on Android. Brussels. Available online at https://ec.europa.eu/commission/presscorner/detail/en/IP_15_4780 |
| European Commission | (7/14/2016) Antitrust: Commission takes further steps in investigations alleging Google's comparison shopping and advertising-related practices breach EU rules. Brussels. Available online at https://ec.europa.eu/commission/presscorner/detail/en/IP_16_2532 |
| European Commission | (3/20/2019) Antitrust: Commission fines Google €1.49 billion for abusive practices in online advertising. Brussels. Available online at https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1770 |
| Google | Info. Available online at https://about.google/ |
| Khemani, R. S. / Shapiro, D. M. | (2003) Glossary of Industrial Organisation Economics and Competition Law. Available online at https://stats.oecd.org/glossary/detail.asp?ID=3262 |
| Lisbon School | Lecture 4: Natural Monopoly. Available online at https://www.iseg.ulisboa.pt/aquila/getFile.do?method=getFile&fileId=340862 |

- Mason, M. (2019) Google denies it has market power. Available online at <https://www.afr.com/companies/media-and-marketing/google-denies-it-has-market-power-20190304-h1by2t>
- Schneider, L. (2019) Company Profile and Job Information for Google. Available online at <https://www.thebalancecareers.com/google-overview-company-culture-and-history-2071320>
- Schuetz, M. (2019) Here's a Guide to the U.S. Antitrust Case Against Big Tech Companies. Bloomberg. Available online at <https://www.bloomberg.com/news/articles/2019-06-08/a-guide-to-the-us-antitrust-case-against-fb-amzn-aapl-googl>
- Toplensky, R. (2019) Big Tech's Antitrust Game Is Changing. The Wall Street Journal. Available online at <https://www.wsj.com/articles/big-techs-antitrust-game-is-changing-11570616378>
- Vincent, J. (2019) Google hit with €1.5 billion antitrust fine by EU. The third antitrust fine the European Union has levied against the US tech giant. The Verge. Available online at <https://www.theverge.com/2019/3/20/18270891/google-eu-antitrust-fine-adsense-advertising>

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