



**Applying Competition Law in the Uber case – does Uber have
an Antitrust problem?**

LL.M. Thesis

Thomas Nighswonger

Student Number: 2014210

Department of Law, Technology, Society and Markets (LTMS)

Prof. Giorgio Monti

August 2020

Table of Contents

List of Figures	3
List of Abbreviations.....	3
1. Introduction.....	4
2. Research Question and methodology.....	6
3. Overcoming the hurdles - Is EU Competition Law applicable?.....	8
3.1. The driver as a separate entity?.....	9
3.1.1. The endless debate of employee vs independent contractor.....	9
3.1.2. The test for employment	11
3.2. The notion of independence and control	14
3.3. Agency.....	16
3.3.1. Uber as an agent for the drivers – Pinar Akmans proposal.....	17
3.3.2. The more likely case – The driver as an agent	18
3.4. Interim conclusion	20
4. The price setting of Uber	22
4.1. Using an app for price fixing	22
4.1.1. Agreement or concerted practice?	22
4.2. The structure of a hub and spoke cartel	24
4.2.1. Establishing horizontal collusion – lessons from US and UK case law	25
4.2.2. H&S in the EU.....	27
4.3. Is setting the price anti-competitive?.....	28
4.3.1. The maximum price as resale price maintenance (RPM).....	29
4.3.2. Efficiencies in the pricing system	32
4.4. Interim Conclusion.....	35
5. The review mechanism – foreclosing potential competitors?.....	37
5.1. Rate your driver – or exclude him?	38
5.2. Efficiencies of the rating system	40
6. The road ahead and concluding remarks.....	42
Bibliography.....	45

Word count: 13.744 (incl. citations)

List of Figures

Figure 1 – Overview of a Hub and Spoke Structure

List of Abbreviations

AG – Advocate General

CJEU – Court of Justice of the European Union

EU – European Union

e.g. – for example

et al. – et alii (and others)

FTC – Federal Trade Commission

GPS – Global Positioning System

H&S – Hub and Spoke

Inc. - Incorporation

RPM – Resale Price Maintenance

SEE – Single Economic Entity

TFEU – Treaty on the Functioning of the European Union

TRU – Toys”R”Us

UK – United Kingdom

US – United States of America

1. Introduction

The gig economy has emerged as a major alternative to traditional businesses. Emerging in the mid 2000's, it has taken off ever since. One of its main promises is that it is faster, more convenient and cheaper than the traditional industry sectors. Uber is by far the most well-known company in the gig economy. Its emergence has resulted in an outcry for stricter regulation of gig economy firms. One of the biggest criticisms is that many of the so claimed "innovations" are a mere avoidance of existing regulations (Stemler, 2017, p. 200). By classifying an Uber driver as an independent contractor, businesses can avoid minimum wage and maximum working time regulations as well as social security costs. While the gig economy has taken off, so has the number of gig economy related lawsuits. Existing businesses are suing gig economy firms for avoidance and breach of existing regulations, most prominently in the area of labor law.

Using a sophisticated algorithm, Uber calculates the fare price within seconds, taking into account supply and demand, road congestion as well as the time of the day. This pricing might be anti-competitive, as it fixes the price among all drivers to the detriment of the consumer. Instead of negotiating or choosing the lowest/most optimal service provider, a consumer can either accept the price or leave it.

The first part of this paper will firstly explore the relevant literature. It will show that, while having generated a lot of scholarly attention, the research in the Uber case is very fragmented. Whilst there is a lot of literature on the applicability of competition law, many researchers only focus on specific legal questions instead of reviewing Uber in full. In the second chapter, this paper will analyze the literature on the Uber case and pinpoint the main gap in the literature that this paper tries to fill, namely that there is no real explanation of how to apply competition law in the Uber case.

Before engaging in an actual competition law analysis, the third chapter of paper will elaborate whether competition law is even applicable or if Uber drivers fall within the same economic entity

(SEE) as Uber. Employment and agency will be the main focus of this chapter. The fourth chapter will engage in the actual competition law analysis, highlighting the requirements for finding a Hub and Spoke (H&S) price fixing cartel and applying those findings to the case. It will also stress the competitive harms and efficiencies that come from this pricing.

Besides the pricing, this paper will also look into a different practice in the gig economy, the review mechanism. Instead of using a form of administrative governance, gig economy firms rely on platform governance, where the users form part of ensuring safety and conformity with the relevant rules. However, such a system, if implemented the wrong way, can lead to the unwanted exclusion of some members. This paper will elaborate on whether such dangers are profound or if this is just a theoretical harm.

Both the analysis of the pricing system and the rating mechanism will help to gain a better understanding of the Uber case vis-à-vis competition law. By highlighting not only the obstacles to overcome if we wish to apply competition law, this paper goes further by also applying competition law to the practices at hand.

In total, this paper aims to contribute to a more complete understanding of Ubers practices within the relevant rules of competition, not only focusing on the applicability of competition law, but also on the application of competition law.

2. Research Question and methodology

The gig-economy started in the mid 2000's and since then has seen a rapid growth. In 2013, revenues from sharing economy firms are estimated to be around 15 billion US dollars, with revenues expecting to grow to 335 billion by 2025 (PricewaterhouseCoopers, 2014). Uber is arguably the most well-known and infamous gig-economy firm. There is nearly no larger city in which Uber does not already operate. The aim of this paper can be seen as a doctrinal piece, trying to explain if and how competition law can apply in the Uber case and in the sphere of gig-economy firms.

The first part of this paper will start with a debate whether competition law applies in the Uber case. This paper will bring together ideas and opinions from different areas of law and different schools of thought to provide the reader with an overview of the different obstacles that need to be overcome if we wish to apply competition law. A lot of literature has been produced to show that current labor law regulations struggle with correctly classifying an Uber driver (Means & Seiner, 2016; Woo & Bales, 2017). Academics are equally divided on what an Uber driver ultimately is, an employee (Davidov, 2017, p. 14) or an independent contractor (Geradin, 2017, p. 16). A similarly large body of literature supports the creation of some form of special regulatory solution to settle the debate (Todolí-Signes, 2017, p. 201). This paper will build upon the foundation already laid by academics, however besides highlighting the main problem, this paper will also showcase the current trend in regard to employment classification by the Court of Justice of the European Union (CJEU). This paper will contribute by not only bringing together different viewpoints, but by also pointing out what the result for competition law would be if the road of a special regulatory solution would be followed. While such a solution would be beneficial for the areas of labor law, its impact on competition law is limited, which is an important contribution in this paper, as such impacts have not been investigated under competition law yet.

Outside the areas of labor law, agency law has become more a more prominent field of investigation for researchers (Akman, 2019; Nowag, 2018). This paper will build upon these findings to contribute to a better understanding of agency law in the gig economy and show that there is a potential agency relationship, however different in form than some authors propose (Akman, 2019). Therefore, the first research question this paper aims to answer is whether competition law applies in the Uber case.

The second part of this paper is concerned with the applicability of competition law. While the literature gives a good indication of the anti-competitive problems (Mandrescu, 2017; Nowag, 2018), it is silent how to apply competition law in the Uber case. Two set of practices have been selected to be judged under competition law, the pricing mechanism and the rating system. In regard to Ubers pricing, this paper makes another, very important contribution to current research, namely a development and extension of the current doctrine of H&S cartels. While not a comparative paper, this paper will draw from insights (*Interstate Circuit, Toys"R"Us*) from the US (Harrington Jr & Harker, 2018; Orbach, 2016) and the UK (McCabe, 2012; *JJB*), as the law is more developed in this regard than in the EU.¹ This paper will review the constituent elements and build upon these findings to evaluate Uber under this doctrine. This will answer the second research question, whether the pricing mechanism constitutes an agreement that is anti-competitive.

The last part of this paper will elaborate on the review mechanism. While the review mechanism does not seem to raise competitive problems as some authors suggest (Evans, 2012), this paper will show that, if viewed as standard and premium agents, this might nevertheless pose problems for competition law. Therefore, this paper builds on prior findings by competition authorities (Federal Trade Commission, 2016) and contributes to the discussion on the effectiveness of review mechanism.

¹ For the latest case see: *AC-Treuhand AG*.

3. Overcoming the hurdles - Is EU Competition Law applicable?

In order to fully understand the competitive concerns of Uber, we have to look at its practices. A ride-seeker opens the Uber app, selects his destination and is able to choose from different modes of vehicles (e.g. UberX, UberBlack or a van). After selecting the preferred vehicle, the app calculates the fare price. Once the ride-seeker accepts this calculated fare price, the transportation request gets sent to all drivers in the vicinity. A driver can accept the rideshare request, he then gets the directions to the position of the ride seeker as well as directions to the drop-off point. The ride-seeker is not able to choose between different drivers. After dropping off the ride seeker, both have to rate one another on a scale of one to five stars. The ride-seeker can add a tip for the driver after the ride, then the transaction is complete.

What seems like a standard business transaction on first sight can hide many competitive concerns. This paper wants to focus on two of these practices. The most obvious and problematic practice is the price setting of Uber. Uber calculates the price depending on the availability of supply and demand, the time of the day as well as the distance of the ride.² The fact that the price varies depending on changing circumstances is not so problematic, it follows many basic economic principles. The crux of the case lays within the fact that the driver has no room to negotiate the fare price with Uber or the ride seeker. A driver is only able to offer a lower fare than the one calculated by Uber, however there is evidence that this rarely happens (Anderson & Huffman, 2018, p. 877). In practice, this could mean that Uber is fixing the price horizontally among all the drivers.

A different practice of concern is the review mechanism of Uber. If a driver falls below a certain rating, he gets removed from the platform. This might be exclusionary or favor some drivers over others. Undoubtedly, such a function can bring many safeguards, however how is such a practice anticompetitive nevertheless?

² Uber calls this dynamic pricing. See for more information:
<https://help.uber.com/riders/article/what-is-dynamic-pricing?nodeId=ba2b4925-9aed-48de-9398-8889607ee0e4>

Both of these practices fall within the “agreement” section of competition law. However, in order to evaluate whether there is an agreement or concerted practice, one first has to see if competition law is even applicable. If a driver can be classified as an economic unit that is part of Uber, the agreement between the driver and Uber would fall outside the scope of competition law. This chapter will look into the relationship between Uber and its drivers from three different perspectives. All three perspectives will elaborate whether the driver forms part of the organization of Uber, meaning he is not a separate economic entity and thus not a competitive force in the market. Similarly, if the driver is to be found an employee of Uber, competition law also does not apply. The third perspective looks at the relationship from an agency perspective, as agency agreements usually falls outside the reach of competition law as well.³

3.1. The driver as a separate entity?

Ostensibly, a driver is an undertaking in the sense of competition law as defined in the *Höfner* judgment.⁴ A driver is clearly engaged in an economic activity, he is picking up passengers after receiving and confirming a transportation request in exchange for remuneration.⁵ According to settled case law, an undertaking is considered an economic unit.⁶ However, the question that arises is, whether a driver is a separate entity that is distinguishable from Uber or if they belong to the same economic entity, Uber Inc. The most common form belonging to the same economic entity is in cases of an employment relationship.

3.1.1. The endless debate of employee vs independent contractor.

Ever since Uber has started operating, the classification of its drivers has been subject of fierce debate. Alone in the United States, more than a hundred lawsuits have been filed on this topic (Malos, Vogelgesang Lester, & Virick, 2018). The proper classification is essential in many

³ Commission Regulation (EU) No 330/2010 (Block Exemption Regulation).

⁴ *Klaus Höfner and Fritz Elser*.

⁵ *Ibid*, para 122.

⁶ *Mo Och Domsjö AB*, para 87; *General Química*, paras. 34–36.

dimensions. An employee has the right to certain employment benefits such as overtime pay, paid leave and health insurance, benefits an independent contractor does not have (Woo & Bales, 2017, p. 469). For competition law, a proper classification is essential. If an individual is found to be an employee for competition law purposes, he falls outside the scope of competition law on the grounds of public policy. In *Albany*⁷, the CJEU held that employees do not conduct an economic activity and in *Becu*⁸ it was held that the nature of the employment contract prevents an individual from being classified as an undertaking. For the purpose of competition law, employees, during their employment relationship, are incorporated into the undertaking they work for.⁹ They do not work for themselves, the fact they work for the undertaking that is employing then makes employees form an economic unit with the employer.¹⁰

Advocate General (AG) Jacobs in *Albany* proposed a complete exemption for employees, as they never pursue an independent economic activity.¹¹ The CJEU did not follow the AG on his suggestion, the Court preferred to stay with a case by case approach. Within such an approach, the Courts will look at the facts of each case and decide, whether for a given task, an individual is working on behalf of a company or if he is working for himself (Townley, 2010, p. 15). Ex-employees (Wish & Bailey, 2018, p. 90) or self-employed persons will be considered undertakings and are not exempt.¹² An employee, who acts outside the scope of his employment contract may also be subject to the rules of competition law, given he is able to act autonomously and with a competitive force in the market (Odudu & Bailey, 2014, p. 1736). With self-employed, the Court again distinguishes between self-employed and false self-employed, with the determinant factor being if a self-employed person actually mirrors the function of an employee.¹³ Unfortunately, *FNV* gives no clearer guidance, leaving it up to the national courts to make the functionality test on a case by case basis (Daskalova, 2017, p. 23). For competition law, this means it has first to be

⁷ *Albany International BV*.

⁸ *Becu*.

⁹ *Ibid* para 26.

¹⁰ *Ibid*.

¹¹ *Albany International BV*, Opinion of AG Jacobs.

¹² *FNV Kiem*.

¹³ *Ibid* para 42.

assessed whether an Uber driver is an employee of Uber before making an investigation into potential anti-competitive agreements.

3.1.2. The test for employment

In internal market law, the test if one is a worker is whether a person is under the supervision and control of another person in exchange for remuneration.¹⁴ In competition cases, the test is slightly different, here the Court checks if the person in question is separate entity (i.e. an undertaking) that follows an economic activity. The ruling in *Becu* aligned the internal market definition of a worker with the competition law definition of an employee (Lianos, Countouris, & De Stefano, 2019, p. 300). Competition law here borrows from internal market law, as the requirements to finding an economic activity under EU competition law mirror the internal market law test for subordination and control (Townley, 2010, p. 8). When testing for employment under competition law, it includes the notion of control, which consists of subordination, commercial independence and stable nature of the employment relationship (Daskalova, 2017, p. 14). Both the subordination requirement as well as the commercial independence test were affirmed in the *FNV Kiem* judgment.¹⁵ The commercial independence test, as stipulated by AG Wahl in *FNV Kiem*, investigates the commercial freedom of the driver, including a risk assessment of the business as well as the possibility of profit retention.¹⁶ While the tests in general are similar, the slightly different requirements mean that the difference lays in the details. This is interesting as such a distinction means that a person might be considered a worker for the purposes of internal market law, but not an employee under competition law (Daskalova, 2017). Therefore, the correct classification of a person not so much depends on a functional test, but which legal basis is applied, which is very legalistic (Townley, 2010, p. 12).

The Uber case blurs the line between employee and independent contractor. While working for Uber, some factors clearly indicate an employment relationship. Uber sets the fare price, with

¹⁴ *Michel Trojani*, para 22.

¹⁵ *FNV Kiem* (n 12).

¹⁶ *FNV Kiem*, Opinion of Advocate General Wahl, para 45.

drivers not being able to negotiate a higher fare price (Woo & Bales, 2017, p. 480). Drivers are also subject to a rigorous set of rules and practices while working for Uber (Lao, 2017, p. 1556). On the other hand, a driver sets its own working schedule (Woo & Bales, 2017, p. 469), can work for multiple platforms (Lao, 2017) and uses his own vehicle. Uber itself classifies that drivers are independent contractors but, in both jurisdictions, not the classification but the actual relationship between the worker and the employer is the main criterion to determine the relevant status. On face value, the drivers have significant amount of control over their work schedule. However, the nature of the on-demand economy paints a different picture, as the dynamic pricing has a significant impact on when a driver is online. As the fare price varies depending on the time on the day and supply and demand, a driver can make the most money by following the recommendations of Uber when to drive (Means & Seiner, 2016, p. 1542). Uber thus exercises indirect control over the driver's schedule, as driving during certain times of the day is economically unprofitable. Yet, the problems remain, as this new form of work partially fits the description of both employment and independent contractor status (Woo & Bales, 2017, p. 475). While under internal market law, Uber drivers might fit the definition of a worker, them being ostensibly engaged in an economic activity and having certain amounts of freedom might not fit the definition of an employee under competition law.

As the current tests lead to unclear results, it would be up for the Courts to determine what an Uber driver ultimately is (Todolí-Signes, 2017, p. 200). The most well-known example comes from the UK, where the Court in *Aslam* rejected Uber's argument that the drivers operate their own businesses and, looking at the practical reality between Uber and the drivers, classified them as workers and not as independent contractors.¹⁷ This case is a labor law case, in which the Court stressed the amount of control Uber exercises over the drivers, also taking into account the regulatory framework under which they operate.¹⁸ Looking at all the relevant facts, the Court concluded that a driver is working for Uber and not the other way, given the amount of control the platform exercises over each driver. This judgment was welcomed by many academics and

¹⁷ *Aslam & Ors v Uber BV*, para 87 and 96.

¹⁸ *Ibid* at 96.

practitioners, as they believed the judgment adequately captures the economic realities in the relationship between driver and the platform (Davidov, 2017; Freedland & Prassl, 2017, p. 9). However, there is one big caveat in this case, namely that the status of a worker is not the same as an employee in the UK and they are thus not awarded all, but only some basic employment rights (Kenner, 2019).

The CJEU has not had a chance to decide on the employment dispute, it also declined to address this in the *Uber Spain* case.¹⁹ AG Szpunar did acknowledge that Uber controls all the necessary requirements for a tax-driver compared to a regular urban area transportation provider.²⁰ The CJEU followed the opinion of the AG, holding that Uber exercises a decisive influence over the conditions upon which the service is provided and that the transportation service by the driver is integrally linked to the intermediation service by Uber and that therefore, Uber is not a service provider under Article 56 TFEU but a transportation provider under Article 58(1) TFEU.²¹ The reasoning of the Court is remarkably similar to the majority opinion of the Employment Tribunal in the UK (Kenner, 2019, p. 13).²² The judgement is in line with prior decision of the CJEU, finding that certain forms of work deserve protection. In *Becu*, dockworkers on short-term fixed contracts were seen as part of the economic entity of the employer, despite contracts only lasting a few hours (Lianos et al., 2019).²³ *Raulin*²⁴ awarded worker status to on call employment and *FNV Kiem* awarded employment status and collective bargaining right to falsely self-employed musicians.²⁵ In *Uber Spain*, probably because the question was not referred, the employment question was not answered, yet both AG and Court seem open to awarding an Uber driver the status of a worker and therefore some forms of statutory protection.²⁶

¹⁹ *Uber Spain*.

²⁰ *Uber Spain*, Opinion of AG Szpunar, para 51.

²¹ *Uber Spain* (n 19), para 40.

²² The Appeals Tribunal dismissed Uber's appeal and upheld the Employment Tribunal's decision, the case is currently pending before the Supreme Court.

²³ *Becu* (n 8).

²⁴ *VJM Raulin*.

²⁵ *FNV Kiem* (n 12).

²⁶ *Uber Spain* (n 19).

While this might be satisfactory for the workers as they themselves would enjoy more protection, for competition law this means little. The flexible nature of the work as well as drivers using their own vehicle, makes it hard to find a solution using the *Kiem* test. While for internal market law, a worker classification would solve a lot of issues, it would not help in assessing employment status under competition law. Introducing a new category of worker such as the independent worker by Harris & Kruger (2015) would not solve this problem either, as the central problems would remain.

As of today, this debate will continue, at least until the CJEU or the European legislator will offer more guidance. A driver still has enough freedom to decide when to work and to accept rides, these elements in the relationship are simply too strong to ignore. On the other hand, a driver is under too many restraints and control mechanisms to be able to fall within the independent contractor status. To this day, it is simply not possible to give a definite answer, some elements point towards an employee status whereas some point towards the status of an independent contractor. The approach in the UK seems sensible, trying to create a middle ground between the two concepts for labor law purposes. However, for the purpose of competition law, the fact that a clear employment relationship cannot be found *ceteris paribus* means the agreement between Uber and its drivers is subject to the scrutiny of competition law.

3.2. The notion of independence and control

Being a separate legal person is not enough to make competition law applicable, the undertaking needs to be able to independently act on the market.²⁷ A driver is considered a separate entity if he is able to exert a single competitive force on the market (Odudu, 2011, p. 1726). This means he has a real freedom to determine his conduct in the market.²⁸ Otherwise, he falls within the same economic entity of Uber and competition law does not apply (Van Cleynenbreugel, 2012, p. 2). Besides employment, the most common example is that of a parent subsidiary

²⁷ *Suiker Unie*, para 173.

²⁸ *Imperial Chemical Industries Ltd*, para 134 (*ICI*).

relationship.²⁹ Agreements between a parent and a subsidiary with the same owner are presumed to fall outside the scope of competition law, as there is a presumption of non-competition.³⁰ Already established in *ICI*, a subsidiary, due the notion of control from the parent company, has no real freedom to compete in the market but is always dependent on the parent.³¹ Accordingly, a parent is then also responsible for breaches of competition law by the subsidiary (Koenig, 2017, p. 281). Similar to the test in employment cases, the Court mainly uses the control test. In case of Uber, the drivers are not a subsidiary of Uber, Uber does not hold any shares in the businesses of the driver, they act independent of Uber. Thus, the *Viho* presumption does not apply. However, Uber might still exercise decisive influence over its drivers. This can be seen for example by calculating the fare price, processing the payments as well as maintaining a driver's code of conducts with recommended standards (Uber, 2012c). Such vertical agreements fall within the scope of competition law too.³² Though the non-ownership test in *Suiker Unie* refers to agency agreements, its reasoning can be transplanted to the drivers, as the moment Uber exerts such a decisive influence on their work, it might restrain them from enjoying their independence in the market (Van Cleynenbreugel, 2012, p. 29). If a driver is an auxiliary organ that forms an essential part in the entity that is providing the service, then he is considered to be part of the same economic entity (Townley, 2010, p. 8). In the case of Uber, despite Uber having a decisive influence on the drivers, it is not enough to remove them from being independent in the market. First and foremost, the drivers can decide independently when and where to work. They also use their own vehicle which they are responsible for. The driver is not required to accept a transportation request and he is free to work for other platforms as well. Therefore, despite Uber exercising a fair amount of control over the driver, the driver still retains his competitive force within the market, making him a separate economic entity.

²⁹ Communication from the Commission – Guidelines on the applicability of Article 101, para 11.

³⁰ *Viho*, para 47.

³¹ *ICI* (n 28), para 134.

³² *Consten & Grundig*.

3.3. Agency

An agency agreement is defined as an agreement, where the agent, on behalf and authorization of the principal, concludes a contract in the name of the principal in exchange for a commission (Akman, 2019).³³ If such an agreement is found, the agent and the principal are seen as one single entity and therefore not subject to Article 101(1) TFEU (Zhang, 2013, p. 565). The rationale behind such a rule is that an agent, similar to a parent-subsidary relationship, is not able to conspire with the principal, because they form part of a single entity (Zhang, 2013, p. 573). The principal and the agent have a common center of decision making, any agreements between them does not remove an independent economic unit from the market, as the agent is already part of the economic entity of the principal (Zhang, 2013, p. 573).

In order for an agreement to be subject to agency, a number of factors have to be present. It is essential that the agent bears no commercial risk within the transaction and that they operate as an auxiliary organ, forming an integral part of the principal.³⁴ The second leg in this test is exactly the test in *Suiker Unie*.³⁵ Furthermore, if an undertaking is not able to independently determine its conduct in the market, but carries it out according to the instructions by the principal, it is also a matter of agency.³⁶ The test of the assumption of risk is not to be understood literally, as long as the risk assumed by the agent is negligible, it still falls within the definition of agency.³⁷ The assumption of risk has to be tested on a case by case basis.³⁸ Further, an agent can be an independent business with premises and personnel as well as act for multiple principals at the same time.³⁹

³³ Guidelines on Vertical Restraints, para 12.

³⁴ *Volkswagen and VAG Leasing*.

³⁵ *Suiker Unie* (n 27).

³⁶ *DaimlerChrysler*.

³⁷ *CEPSA*.

³⁸ *Automobiles Peugeot SA*.

³⁹ Vertical Guidelines (n 33), para 13; *CEPSA* (n 37); *DaimlerChrysler* (n 36).

3.3.1. Uber as an agent for the drivers – Pinar Akmans proposal

Before jumping into the definitions of the specific risks under the Vertical Guidelines, applying agency to the Uber case raises a few flags. One of the key requirements for agency is that the agent forms an integral part of the organization of the principal. Pinar Akman (2019) proposes that Uber is acting as an agent for the drivers. She holds that Uber, as the agent, is able to negotiate/conclude contracts on behalf of the drivers. Uber also holds money as well communicates/receives information on behalf of the drivers. She further argues that the drivers are paying the platform, instead of a driver being paid by Uber. She uses this argument to refute the claim that Uber drivers are employees, as the payment stream goes from the drivers to Uber.

Unfortunately, despite the sophisticated analysis of agency law, it completely misinterprets the realities of what is actually happening. One has to think back on how a transaction is concluded. A ride-seeker sends a request, Uber, as the intermediary, sends the notification to all drivers in the area. Only when a driver accepts the request, will there be a transaction. It is the driver, who ultimately concludes the contract on behalf of Uber, a transaction that is visible and traceable on the Uber app. Whilst it is true that Uber holds money on behalf of the drivers, she completely misjudges the actual revenue streams. She is right to assess that Uber takes a percentage of each transaction, but money never flows from driver to Uber. Uber collects money from the ride seeker and automatically deducts its commission when transferring the money to a driver. But this does not mean that the drivers are paying Uber, on the contrary, a driver is paid by Uber.

Applying Akmans findings to the requirements under the Vertical Guidelines⁴⁰ do not change the findings that Uber being an agent is questionable. The guidelines feature a non-exhaustive list with risks that prevent a relationship from being classified as an agency relationship.⁴¹ One of the requirements for ruling out agency is the assumption of risk by the agent. After coming under public scrutiny for not providing insurance coverage for its drivers while working for Uber, Uber

⁴⁰ Vertical Guidelines (n 33), para 14.

⁴¹ Ibid, para 16 & 17.

now provides all drivers with liability insurance while the Uber app is turned on, covering both waiting times for a ride request as well as on route to pick up and during the ride itself (Uber, 2012a). Akman (2019, p. 270) argues that this is only to attract new drivers to the platform. However, the fact that Uber carries liability insurance for the drivers is not only seen as an investment in the platform business to attract new drivers, but is a clear assumption of risk for the drivers, namely that the driver does not carry a liability insurance or that their liability insurance is insufficient. Of course providing insurance attracts more drivers to the platform, especially those that do not carry an insurance or those unwilling to purchase one. But in the case of an accident, it is the insurance by Uber that then pays money out to a claimant, an insurance Uber pays premiums for. It is the assumption of this risk that the driver might get into an accident, that is crucial here. From a drivers' perspective, Uber is indeed providing necessary liability insurance to all drivers at no additional costs (Uber, 2012b). Following Akman, this would be an assumption of risk by the agent for the principal, ruling out a potential agency case.

In practice it seems to be the other way around, Uber is the one supplying the driver with the necessary software, making the driver a mere auxiliary organ that performs the service on behalf of Uber. Further, Uber is free to act in the market as it pleases, it is the drivers that need to follow a stringent set of rules and the CJEU has already held that Uber exercises a decisive influence on the drivers.⁴² Under Akmans proposition, it seems that it is the principal in her case that is not able to act independently in the market while the agent is under no constraints.

3.3.2. The more likely case – The driver as an agent

By simply looking at the facts and driver-platform relationship, there is no evidence that Uber can be classified as an agent and the driver the principal. Much more likely, the classification should be reversed, namely that the drivers are working as agents for Uber, the principal. This would resemble the classic taxi operations, which Uber is trying to mimic, better. Uber, similar to a dispatcher, organizes the ride, whereas the driver carries out the task. Using the test in

⁴² *Uber Spain* (n 19).

Suiker Unie and the amount of control exercised, it might very well be that the drivers are a mere auxiliary organ for Uber, but this also does not hold true for all drivers. Whereas those that use Uber as a source of primary income might validly be classified as agents, those that only work for Uber part time or use different platforms simultaneously, the answer might be different. Ultimately, it has to come down to the assumption of risk by the agent, whether the agent is Uber or the driver.

Overall, after analyzing both the integral part and assumption of risks requirements, it is clear that the notion of Uber being the agent of the driver is not convincing. Uber is assuming too many risks in relation to the driver that would make the setup between the two categorize as agency.⁴³ On the other hand, classifying the driver as an agent of Uber seems more convincing, as the driver assumes no risks in the business of Uber. The only risk a driver assumes is not getting paid because a failure to provide the service, a risk that does not rule out a finding of agency.⁴⁴ Classifying the relationship as the one between principal and agent would remove the agreement from the scope of competition law, regardless of how severe the restriction. However, the Vertical Guidelines stipulate one situation in which an agency agreement might nevertheless trigger the applicability of competition law. This might be the case when an agency relationship is used to facilitate collusion, e.g. by exchanging confidential information.⁴⁵ This is what Julian Nowag suggests, that the relationship mirrors that of agency but in reality, looks more like a H&S cartel. Uber, through working with multiple, even thousands of agents at the same time, is facilitating a cartel that fixes prices with all drivers that use the Uber app (Nowag, 2018, p. 398). Such a finding would require a different set of analysis, an analysis taken out in the subsequent chapter. Even though one could find a principal-agent relationship, such a construct would not rule out the applicability of competition law.

⁴³ Vertical Guidelines (n 33), para 21.

⁴⁴ *Ibid*, para 15.

⁴⁵ *Ibid*, para 20.

3.4. Interim conclusion

When signing up for Uber, a driver agrees to exclusively use the app when working for Uber. Part of agreeing to use the Uber app is to agree that the fare price for each ride will be calculated by Uber. This makes using Uber easy and convenient, for both the ride seeker as well as the driver. Calculating the price takes mere seconds, after agreeing to the price, the app will match the ride seeker with a driver in the vicinity who will pick up the ride seeker shortly after.

What seems like a convenient business transaction has a large impact on the ridesharing market. What Uber takes from the drivers away is their independence to set the price. Uber sets this price and offers this price to all drivers. The ride-seeker is left with no choice, he can either accept or choose a different mode of transport, which at given times is almost impossible. Uber might just as well fix the price at a suboptimal level, with the price being lower in a perfect supply demand equilibrium. Competition law would come in and remedy such a practice, as price fixing generally is seen as a severe restriction of competition.

However, there is a possibility that the conduct in question might not be remediable by competition law because it is not applicable. While there is no decision to this day by the CJEU, *Uber Spain* hints that the Court might be keen to finding an employment relationship between Uber and a driver. If such were the case, any agreements between driver and Uber are exempt from competition law based on grounds of social policy. This would be a dangerous path to walk onto, as ignoring the competitive harms that come from completely exempting employee-employer agreements might not lead to an optimal Community balance (Townley, 2010, p. 14). This means, that instead of balancing conflicting interest, such as the case here with employment and competition, one gets disregarded in favor of the other. A similar situation would arise were the Courts to find an agency agreement, again this would normally remove the agreement outside the scope of competition law.

This does not mean that Uber is off the hook, on the contrary. Some features of the business model clearly resemble an independent contractor relationship, despite *Uber Spain* being sympathetic to the idea that a driver *might* be an employee. It will ultimately also depend on the frequency one is driving, a driver who drives eight hours a day will be more likely to be found to be an employee than a part time driver who only drives a few hours per week. The same holds true for an agency relationship. Despite finding an agency agreement, competition law still applies if it is used to facilitate a cartel. This directly serves a bridge to the next chapter, where the constituent elements of such a cartel, whether there is an agreement, and what the effect on competition is, will be discussed.

4. The price setting of Uber

Whereas the third chapter was concerned with the applicability of competition law, the next two chapters will analyze two separate practices of Uber. This chapter will explore the pricing mechanism of Uber. When Uber calculates the price, it sends this price to all drivers in the area. This might be classified as price fixing. This chapter will firstly discuss whether there is an agreement to fix prices between Uber and the drivers. This will be done by utilizing the constituent elements of a H&S cartel. Secondly, it will evaluate, given that there is an agreement, if the agreement can be classified as an object or effect restriction. It will also be shown that the pricing mechanism mirrors that of fixed resale price maintenance (RPM). The justifications for using such a pricing structure will also be mentioned as well as potential ways to change the pricing system to ensure compliance with competition law.

4.1. Using an app for price fixing

In order for EU Competition law to be applicable, there has to be an agreement or concerted practice that has the object or effect to hamper competition. For the scope of this part, this raises the question whether Uber is in an agreement with all drivers to fix prices.

4.1.1. Agreement or concerted practice?

For a conduct to fall under Article 101(1) TFEU, it needs to be either in the form of an agreement or a concerted practice. According to the CJEU in *Bayer*⁴⁶, there must be a meeting of minds of both parties to classify as an agreement. A concerted practice on the other hand, is conduct that has not reached the stage of an agreement yet, however a form of coordination is still present.⁴⁷ For the Uber case, this raises three questions. Is there an agreement, who is in an agreement with whom and what is the content of the agreement? Uber is in an agreement with each driver

⁴⁶ *Bayer AG*

⁴⁷ *ICI* (n 28)

that the driver has to use the Uber app and agrees with Uber's terms and conditions if he wishes to drive for Uber. There is no passage within the terms and condition that stipulates that Uber and the drivers wish to fix prices. However, this raises the question, does the use of the Uber app and the acceptance of the terms and conditions also presume that the drivers agree to Uber fixing the price? It is possible that a driver has no other choice but to accept the terms and conditions and therefore accept Uber's pricing if he wishes to join Uber (Passaro, 2018, p. 268). The final agreeing to Uber's pricing happens when a driver gets a transportation request, which he can either accept, decrease in price⁴⁸ or decline. In any case, the fact that a driver cannot set the price from the start makes it likely that by agreeing to Uber's terms and conditions, he also accepts that Uber is the one who ultimately sets the price, even though that happens at a later stage.

In the case of a concerted practice, the Commission would still have to prove that the drivers are aware of the price setting of Uber, following the case law of *Eturas*.⁴⁹ Here, the CJEU required awareness to the concerted practice in order for an undertaking to be liable under Article 101(1) TFEU. An undertaking is only able to escape scrutiny if it can prove it was not aware of the practice (Heinemann & Gebicka, 2016, p. 441). Unlike in *Eturas*, the drivers are aware that Uber calculates the fare price for them, it is contingent upon using the Uber app and more importantly, the driver gets a notification each time a new ride is offered to him.

While it can be safely assumed that there is some form of agreement between Uber and each driver, does this also mean the drivers are in an agreement with each other? On the surface this seems questionable, as the drivers among each other have no contact with each other, they don't even know who else is driving for Uber. But it is the nature of a hub and spoke cartel, that might connect the drivers nevertheless.

⁴⁸ The discussion whether Uber's price is fixed or recommended will be investigated at a later stage.

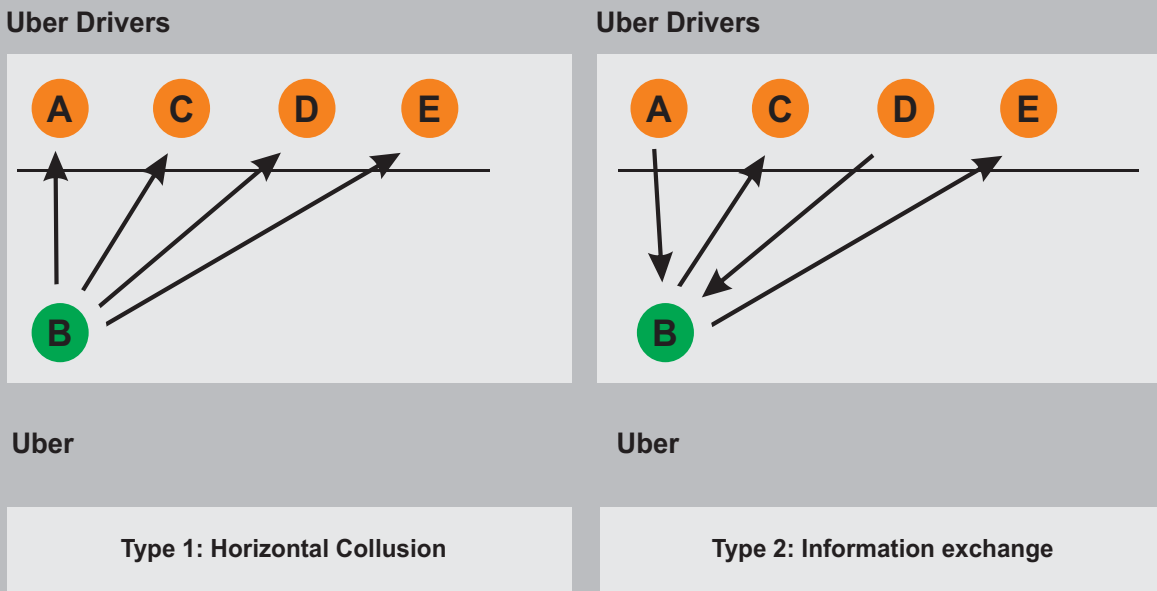
⁴⁹ *Eturas*

4.2. The structure of a hub and spoke cartel

Typically, a H&S cartel can be explained via an A-B-C scenario, A and C are market participants (the spokes) in the same level of the supply chain, B (the hub) is either a customer or a supplier of both. For Uber, A and C are drivers, whereas Uber (B) connects A and C with ridesharing requests. Figure 1 showcases two distinct types of H&S cartels. Such a cartel can either be used to facilitate horizontal collusion on behalf of the hub, here shown as Type 1, or to engage in an exchange of confidential information, here shown as Type 2. In a Type 2 case, the danger lays with the content of the exchanged information, which can be used to establish horizontal price fixing among the spokes and breach of their obligation of independence (Odudu, 2011). Here, the spokes use an intermediary, the hub, to exchange information. The goal of such an information exchange is to reach a mutual beneficial strategy, normally such a strategy is to increase coordination among A and C (Bennett & Collins, 2010, p. 321).

How can we judge the Uber case? On the surface, Uber is in a vertical relationship with each driver, each of them under a set of identical vertical restraints. These restraints include agreeing that Uber sets the maximum price, following the codes&conduct of Uber as well as the mandatory use of the Uber app. Uber is acting as a hub in this setting that separates the business model from a mere set of vertical relationships (Orbach, 2016). The way Uber calculates its prices and enforces these resembles the basic structure of a Type 1 H&S cartel. Within such a setup, Uber facilitates horizontal collusion (i.e. all drivers accept the price) without the drivers having to directly communicate with each other. In order to fully show how such a factual setup has been decided in the past, this paper will draw from US and UK jurisprudence, as the case law is more developed in these countries.

Figure 1: Overview of a Hub and Spoke structure



Source: own creation, based on Londoño van Rutten & Buts (2019)

4.2.1. Establishing horizontal collusion – lessons from US and UK case law

Uber is in an agreement with the drivers, that seems clear, however can it be subsumed that the drivers, though not being directly in agreement with each other, be indirectly agreeing to fix prices? Cases from the US and the UK will serve as a basis before comparing Uber's conduct against these cases.

*Interstate Circuit*⁵⁰ was the first case in the US that described a H&S cartel (Klein, 2017, p. 430). In that case, Interstate Circuit, a dominant first-film exhibitor in six different US cities, simultaneously entered into negotiations with eight major film distributors to set a minimum admission price charged at the movie theater. If one of the distributors would not agree or not

⁵⁰ *Interstate Circuit*

comply with these terms, a distributor would lose all first film rights in Interstate Circuit cities. Each distributor knew that identical terms were offered to all competing distributors in Interstate Circuit cities and accepted these terms (Orbach, 2016, p. 6). Both Interstate and the distributors benefitted from the agreement, with the result being higher profits for all involved parties (Klein, 2017, p. 430). The distributors were not in any agreement with one another, yet the Supreme Court found that acceptance of Interstates terms established a Hub and Spoke conspiracy.

Toys“R”Us (TRU) is a more modern equivalent of the *Interstate* case.⁵¹ TRU, a toy retailer, entered into bilateral agreements with toy manufacturers to refuse to supply to TRUs largest competitor (Londoño van Rutten & Buts, 2019, p. 8). The manufacturers were hesitant at first, as agreeing to the cartel agreement would mean a decrease in profits (Harrington Jr & Harker, 2018, p. 12). Similar to *Interstate*, the threat of TRU terminating the business relationship with the supplier (Londoño van Rutten & Buts, 2019, p. 8) paired with TRUs assurance that other manufacturers were presented the same terms was sufficient to all spokes to agree with TRUs terms (Harrington Jr & Harker, 2018, p. 17). As in *Interstate*, the Court found a horizontal, price fixing conspiracy.

Both cases are illustrative of the current reading of H&S cartels in US law. It is not the vertical agreement, but the factual setting and circumstances where one can infer a horizontal conspiracy (Orbach, 2016, p. 6). What is required is a hub, a spoke and a vertical agreement that connects the hub with the spokes while facilitating collusion among the spokes via the hub (Orbach, 2016, p. 14).

Courts in the UK are the only national Courts within the European Union that have established a legal test for H&S cartels. Both cases, *JJB* and *Argos*, contribute to the current case law.⁵² Unlike the cases in the US, both cases are more concerned with a Type 2 H&S cartel, where confidential information was exchanged. Both cases ended up on a joint appeal before the Court of Appeal,

⁵¹ *Toys“R”Us*

⁵² *Argos Ltd, Littlewoods Ltd; JJB Sports plc.*

where the Court required actual knowledge, instead of presumed knowledge of the anti-competitive scheme to be attributed to a H&S cartel (McCabe, 2012, p. 453).

4.2.2. H&S in the EU

In the EU, hub and spoke cartels are similarly treated, however the case law is less developed as in the UK or US. *AC-Treuhand* held that the organizer of a cartel, despite not profiting from the cartels activities or being part of the cartel, is still liable of violating Article 101(1) TFEU.⁵³ However in our case, Uber is also benefitting from the cartel, as it obtains a commission from the rideshare price.

In regard to the knowledge attribution in information exchange cases, EU law deviates from UK law. Under UK law, actual knowledge and use of information by a spoke has to be proven, which is presumed under EU law.⁵⁴ Further, according to the *Anic* case, members of an agreement are presumed to take the received information into account.⁵⁵ The burden is on the spoke to prove that he did not rely on the information. The only way for a firm to avoid liability is to publicly distance itself from the received information, otherwise it is almost impossible to rebut the *Anic* presumption (Bailey, 2008, p. 183). There are multiple different ways to publicly distance oneself from the reception of information and the distancing depends on the facts of each case, however the principle was confirmed in *Eturas*.⁵⁶

Having looked at the case law, how do we judge Uber? Very similar to the US cases, Uber enters into an identical vertical agreement with all the drivers. A series of identical vertical relationships however is not enough to fulfill the requirements of a H&S cartel, especially when the spokes are not aware about the nature and content of the other agreements.⁵⁷ Yet, in the Uber case, every

⁵³ *AC-Treuhand* (n 1)

⁵⁴ *ibid*; *Tate & Lyle plc*, para 66.

⁵⁵ *Anic Partecipazioni*, para 121.

⁵⁶ *Eturas* (n 49), para 46.

⁵⁷ *Argos* (n 52) para 31.

driver is aware that identical terms are offered to each driver. The content of the agreement is that Uber sets the price, there is no room for the driver to engage in a calculation himself.⁵⁸ This leaves Uber and the drivers in a remarkably similar factual setting compared to *Interstate Circuit* and *Toys"R"Us*. Each driver has to accept the agreement brought forward by Uber, if he refuses, he cannot join the Uber platform. Instead of threatening the drivers with termination of supply agreements, not accepting Uber's term means no access to the Uber platform. Despite having an impact on each driver, it also has an impact on all drivers, as no driver is able to charge a different price, as it is set by Uber, which all the drivers are in agreement with. This means, Uber, through a set of vertical agreements, connects all the spokes through a horizontal agreement, despite the drivers not being directly in contact with each other. This means, horizontal collusion in a H&S scenario can be established.

4.3. Is setting the price anti-competitive?

The first part of this chapter focused on whether there is an agreement, showing that there is not only an agreement between a driver and Uber, but also that each driver is in agreement with each other via H&S. Coming back to what was established in the previous chapter, even if the relationship between Uber and the driver can be classified as agency, it would not escape the scrutiny of competition law, as agency agreements that facilitate collusion are not exempt.⁵⁹

Having found that the price mechanism by Uber does pass the agreement/concerted practice threshold, the next step is to ask whether the agreement has the object or effect to restrict competition. The line between a restriction by object and a restriction by effect is often blurry (Heinemann & Gebicka, 2016, p. 446). Clear object restrictions are for example price fixing or market sharing.⁶⁰ According to settled case law, even in object cases, the Commission is required

⁵⁸ A driver is able to reduce the price, though this rarely happens in practice. This paper investigates this closer in the following sub-chapter.

⁵⁹ Block Exemption Regulation (n 3), para 20.

⁶⁰ Commission Communication on horizontal agreements (n 29), para 27.

to examine the practice in its legal and economic context.⁶¹ A restriction by object can only be found, if, given the relevant legal and economic context, there is a sufficient degree of harm to the consumer.⁶² Price-fixing would be a clear harm to the consumer, however such a finding in the Uber case is too hasty. Assessing Uber in the relevant legal context, we often find that Uber brings many benefits in the ridesharing market such as the penetration of underserved markets, lower transportation costs than classical taxi services and lower transaction costs (Uber Inc., 2015). As *Cartes Bancaires* takes a stricter approach to the finding of an object restriction, it is most likely that an effect analysis is necessary to come to an ultimate conclusion whether to condemn Uber or not (Mandrescu, 2017, p. 361). So how can the pricing mechanism be seen?

4.3.1. The maximum price as resale price maintenance (RPM)

Uber is in an agreement with each driver that Uber sets the price. However, is a driver able to change that price? The price setting of Uber resembles RPM, where a supplier imposes an indirect or direct sale price on its buyers (Petit & Henry, 2010, p. 8).

When a driver receives a transportation request, it already contains the calculated price, a driver merely has to accept it. If he wants to offer a lower price, this is quite inconvenient. He needs to manually enter the price he would like to offer, taking into account that he loses part of his commission, as a driver pays the discount out of his own pocket. It is also burdensome to change the price within the app, as the function is hidden. Many drivers are not aware that they can reduce the fare price and if they want to, the way to manually adjust the price is tedious and requires in-depth knowledge about functions within the app (Jagman, 2017). Not only is adjusting the price difficult, many drivers, while on a ride, already accept the next request by simply pressing the “accept button”. Changing this practice goes against the business model of Uber to match passengers as quickly as possible with drivers as it prolongs the matching process (Federal Trade Commission, 2016, p. 66). Adjusting the price instead of simply accepting the price is more

⁶¹ *Groupement des cartes bancaires*, para 53.

⁶² *Ibid.*

tedious and there is evidence that most drivers never have discounted the calculated price (Anderson & Huffman, 2018, p. 877). Drivers might also be aware of this, reducing the incentive for them to offer discounts if they know their competitors are unlikely to offer discounts as well (Jagman, 2017).

Uber is likely to argue that this is merely a form of recommended selling prices, which is not a hardcore restriction.⁶³ Uber is merely recommending a price to the driver, the driver is not allowed to price above that price but he is allowed to offer a discount. If a recommended sales price is however used to disguise price fixing, then it will fall under the hardcore restrictions. This might be the case in Uber's pricing. A driver has little incentive to offer a lower sales price, as the distribution margin of Uber is calculated by the recommended fare price and not the actual fare price. Evidence also shows that barely any driver prices below the calculated price and that adjusting that price is technically difficult to implement (Anderson & Huffman, 2018, p. 877). This means we have to determine whether the price is a fixed RPM or a recommended RPM. It is much easier to escape competition law scrutiny if it is found to be a recommended RPM, as this is subject to an effect analysis. A fixed RPM on the other hand, is a hardcore restriction under the Vertical Block exemption and hard to justify.⁶⁴ Using minimum or fixed RPM may facilitate collusion at the distribution level, the RPM is used to set retail prices which eliminates competition entirely (van Doorn, 2009, p. 9). The RPM used by a common agent (here Uber) is used to facilitate downstream collusion (Bennett, Fletcher, Giovannetti, & Stallibrass, 2010, p. 1291), or to put it in other words, the RPM are used to form a horizontal cartel among the drivers with Uber being the common agent setting the RPM (Petit & Henry, 2010, p. 9). They may also be used as entry barriers to protect new entrants from entering the market (Kyprianides, 2012, p. 381).

If the Commission finds the price that Uber fixes the price, it is a clear object restriction.⁶⁵ Under such a reasoning, Uber sets the price and the drivers have to accept that price. In such a case,

⁶³ *Pronuptia de Paris GmbH*, para. 25.

⁶⁴ Block Exemption Regulation (n 3), Article 4(a).

⁶⁵ Commission Guidelines on the application of Article 81(3), para 21 and 24.

besides analyzing the agreement in the relevant and legal context, the Commission does not need to show the anti-competitive effects, as such restrictions already carry a sufficient degree of harm.⁶⁶ While claiming this is a recommended RPM, in practice it resembles indirect fixing of the fare price, using recommended RPM. The RPM is used to fix the distribution margin, which the Commission classifies as a hardcore restriction.⁶⁷ Minimum or fixed RPM are treated as object restrictions by the Commission⁶⁸ and they are treated as a hardcore restriction under the Block Exemption Regulation.⁶⁹ Those are presumed to restrict competition, however an exemption under Article 101(3) TFEU is possible, yet unlikely (Akman & Sokol, 2017, p. 136). Arguably the biggest benefit of a minimum RPM is to prevent free riding and to protect the quality of the product due to services that are related to the sale of the product that would not be offered without the RPM (Kyprianides, 2012, p. 379). It also prevents a race to the bottom and protects brand image (Petit & Henry, 2010, p. 9).

Besides seeing the calculated price as price fixing, the fact that the driver is able to negotiate a lower fare, the pricing could be seen as maximum RPM. Maximum or recommended RPM are not hardcore restrictions under the Regulation, meaning that an effect analysis is needed to prove the anti-competitive effects (van Doorn, 2009, p. 6). In such a case, the Commission needs to provide a counterfactual, comparing the status quo with and without the RPM.⁷⁰ Maximum RPM brings different pro and anticompetitive effects with it and there is a discussion among legal scholars how to treat RPM. Many critics argue that the anti-competitive effects of RPM greatly outweigh the pro-competitive effects (Bennett et al., 2010, p. 1288).

Should the Commission find that the price is merely a recommended RPM, it needs to conduct an effects analysis to determine the impact on competition in the market. However, as the paragraphs above propose, it is more likely that the Commission finds the pricing mechanism to be fixed RPM. This would mean Ubers pricing is an object restriction and is likely to be prohibited,

⁶⁶ *Cartes Bancaires* (n 61).

⁶⁷ Vertical Restraints Guideline (n 33), para 48.

⁶⁸ *Ibid*, para 223.

⁶⁹ Block Exemption Regulation (n 3).

⁷⁰ *O2 GmbH & Co. OHG*, para 73.

and since there are likely less restrictive means to ensure the pro-competitive benefits, the practice is likely to infringe competition law.

4.3.2. Efficiencies in the pricing system

The paragraphs above have given an indication of potential competitive concerns when looking at the pricing of Uber. Despite looking at the concerns, the Commission also has to take the efficiencies that are created by the practice into account. In order to evaluate efficiencies, a clear description of the relevant market is necessary, as the efficiencies must be in the same relevant market as the competitive concerns (Mandrescu, 2017, p. 363). This becomes increasingly relevant in the market for platform business in which Uber operates, as the business model normally features multiple sides. Evans & Schmalensee (2007) describe this as a multi-sided business model, under which a platform brings together two distinct customer groups, who depend on one another and who would not be able to match without the platform. For a business to be multi-sided, it must reduce the transaction costs for both sides (Evans & Schmalensee, 2012, p. 7). This directly applies to Uber. Uber, as a platform brings together the ride-seeker and the driver together, a transaction that would not be possible outside the Uber platform. The Commission thus has to consider two distinct markets, the market for the ride-seeker and the market of the driver.

A definition of both markets, which exceeds the scope of this paper, would be necessary when evaluating efficiencies, however, the efficiencies do not all have to be in the same market as the restrictions, what is crucial that in the market in question, there are at least some efficiencies.⁷¹ In *MasterCard*, the CJEU held that advantages in other markets have to be considered as well, therefore only making an assessment of the total advantages.⁷² Nevertheless, a definition of the relevant markets when assessing efficiencies is crucial (Mandrescu, 2017, p. 363).

⁷¹ *MasterCard Inc*

⁷² *Ibid.*

The price setting is restrictive in both markets simultaneously, however the harm on the side of the consumer is much more tangible. There is no competition on price between the drivers, the consumer has to pay what is offered to him. While he is able to price down, a driver is not able to increase the price. For example, with a higher-quality car and better interior, a driver might want to differentiate himself at the cost of a higher price. One imagines a limousine driver, with lots of space in the back and complimentary drinks. He has to offer the same price as any other driver. While offering superior quality, a driver is not able to charge a higher price for these services. A driver is not encouraged to provide superior extras or to invest in a better car, as the price he can charge will ultimately be set by Uber, regardless of any additional investment by the driver.

This prevents the driver from earning a higher income. For the consumer, it means he has to accept the price calculated by Uber and there is no opportunity to negotiate the price. He can either accept it or leave it. Whereas the harm occurs in both markets, the efficiencies are mainly visible on the consumer market. The simplicity of the pricing mechanism reduces transaction costs significantly (Edelman & Geradin, 2016, p. 297). Instead of having to negotiate a price with a driver directly or with a taxi dispatcher over the phone, setting the price removes the transaction costs significantly. The reduction of transaction costs also achieves a better resource allocation than traditional taxis, achieving a higher capacity utilization rate than taxis (Cramer & Krueger, 2016, p. 179). Because of the simplicity of the app, Uber, having already fixed the price, can bring together ride-seeker and driver much quicker, an efficiency in both markets. The possibility of surge pricing is also interesting. During peak times, the prices for rides increase (e.g. when there is a major sport event or on a Saturday night) to incentivize drivers to log onto the app (Bernstein, DeCroix, & Keskin, 2019, p. 28). Uber calls this dynamic pricing, in times of high demand, prices increase while in times of low demand, prices decrease. Dynamic pricing per se does seem to generate positive welfare effects, even though the prices are higher during peak times (Bernstein et al., 2019, p. 28). The intuition behind dynamic pricing is to incentivize drivers to log onto the platform during peak times, as demand outweighs supply. As more drivers log on,

the market will move back into an equilibrium of “optimal” supply and demand, making both ride seeker and driver better off despite higher prices.

Uber itself claims many more efficiencies, such as lower prices compared to traditional taxis (Geradin, 2017, p. 11) or the possibility to use ones vehicle for business purposes (Edelman & Geradin, 2016, p. 298). While these efficiencies are not related to the price fixing as they stem from the business model itself, they derive from fixing the price. Without the pricing mechanism, the efficiencies would not manifest themselves in the way they do. Consistent with the current case law⁷³ and prior Commission decisions⁷⁴, the efficiencies also occur in the market where the harm is created. However, they might not be enough to satisfy the criteria under Article 101(3) TFEU, especially the criterion of indispensability.

This is where all the benefits might crumble. The algorithm of Uber fixes the price, Uber argues that this creates certainty and reliable fares, which ultimately the consumer benefits from (Uber Inc., 2015). These benefits are achieved by fixing the price. Other benefits, as mentioned above, also derive from the pricing system. However, could one not ask if the same benefits can also be achieved by letting drivers compete on price, giving them only an estimate price and not a fixed price? As of now, the driver can negotiate the price down, however at the expense of its own commission and not the one of Uber. Unlike Uber, Airbnb gives the user a price indication given specific variables and the tenant is able to set a higher or lower price given his preferences. In the Uber case, a similar scenario is possible, Uber could, for example, recommend to the drivers a price given the demand, route and other variables, yet a driver is still able to negotiate a higher/lower fare than originally suggested, e.g. by entering his fare price into the app. If there is more than one driver, a ride-seeker could even choose between different drivers given his preferences, and select a driver with a higher rating but a higher price. This might make the matching process longer though, as each driver has to enter his price into the app and it needs to be asked how long a driver has time to enter his price into the system. Alternatively, a driver

⁷³ *MasterCard* (n 71)

⁷⁴ Commission Decision in the AT.39964 - Air France/KLM/Alitalia/Delta case

could enter a pricing range, e.g. if the distance is between 1 and 5km, the price is X, if the distance is > 5km, then the price is Y, with the driver entering the details in the system itself. Even then, a driver could adjust the price if he gets a ridesharing request, or he can simply accept his “default” price.

Both alternatives would weaken the central claim that Uber fixes the price and change the analysis more into a recommended than a fixed price. Ultimately, there are less restrictive means available for Uber's pricing mechanism. As shown in the analysis above, the central efficiencies can be kept with an adaptation of the pricing system. Even if the system stays as it is, it is questionable if the benefits outweigh the harms, especially since it's an object restriction of competition.

4.4. Interim Conclusion

If we want to condemn Uber for its pricing mechanism, there are two routes to go. If Uber is holding a dominant position in the market, it is under the obligation not to abuse that position. If the pricing is then found to be abusive, for example by pricing below average avoidable costs, then this is considered abusive. The other route is finding that Uber is in an agreement to fix prices. This is what this chapter has explained. The agreement between Uber and all its drivers can be seen as a H&S cartel.

In order to find such a cartel, we firstly need to cross the agreement threshold. It is not in the agreement between Uber and the driver that they fix prices. However, the agreement contains that the driver has to accept that Uber calculates the price. If a driver does not accept to these terms, he cannot join the Uber platform. As this agreement is identical for all drivers, it is the cumulative effect of each agreement that ultimately proves the conspiracy and links each driver. From a factual setting, Uber's practice is similar to *Interstate Circuit* and *Toys"R"Us*. The drivers are not in any agreement or contact with each other, but the fact that each agrees to the same terms if they wish to join the platform, establishes horizontal collusion.

Not only are the drivers and Uber in an agreement with each other, the effect of the agreement is to fix fare prices, an object restriction of competition. Though the price looks like a recommended price, the practical realities suggest fixed RPM. A driver theoretically is able to offer a lower price, however there is evidence many drivers are not even aware of this function, it is technically difficult to implement within the app and the driver has to pay the decrease out of his own pocket. Therefore, what looks like recommended RPM, is in practice a fixed price, calculated by Uber. This changes the scope of the analysis needed by the Commission or competition authorities. As price fixing is an object restriction, an extensive effects analysis is not necessary. Despite bringing significant efficiencies, those might not be enough to cure the anti-competitive effects, as this paper has shown there are less restrictive means that would be more aligned with the competition rules and that would keep the efficiencies.

On a broader scale, should we really be concerned about the price fixing? It is unclear if a different pricing system would lead to lower prices. Compared to equivalent modes of transport, Uber is significantly cheaper and more convenient, raising the broader question if we should really be condemning Uber's pricing? That is the one question that this chapter cannot answer...

5. The review mechanism – foreclosing potential competitors?

Having extensively discussed Ubers pricing, the last part of this paper is concerned with a practice that only becomes relevant after the ride service has been completed. The driver and the ride-seeker rate each other on a scale of one to five stars, both are able to leave comments and give specific compliments. The comments are not visible on a driver's profile, the only thing a driver's profile suggests is his average rating and an indication about what compliments he received. The review mechanism is important, especially since a ride seeker cannot choose the driver. Once a ride seeker accepts the fare price, Uber automatically matches him with a driver. The ride seeker cannot choose between drivers.

If a customer is not satisfied with the service, there is an included complaint section, where a user is able to flag issues of the ride (e.g. traffic violations, accidents) as well issues of the driver (e.g. potential intoxication). If a driver falls below a certain rating, he temporarily gets suspended from the platform. If violations continue, he gets excluded permanently. The focus of this section is on the trust system whereby the ride-seeker rates the driver. Unlike in the chapter before, the rating system is an explicit part in the agreement between Uber and the ride-seeker. From the get go, a ride-seeker knows that after each trip, he will have to rate his driver (Uber Inc, 2012). The practice is completely separate from the H&S scenario. If a customer refuses to leave a review, he is not able to continue to use Uber before leaving a review. Thus, unlike the last chapter, this section will not discuss whether there is an agreement, but where the theory of harm in such a case is and what the central efficiencies of such a system are.

5.1. Rate your driver – or exclude him?

Uber is putting the driver under certain restraints, those are made clear to a driver once he signs up for Uber. A rating is one of these restraints. If a driver has a bad rating, he gets banned from using the Uber platform. Similar to *Delimitis*⁷⁵, it is the cumulative effects of these vertical restraints that might be problematic. If, such a system is used to deny access to certain drivers, then, given the economic and legal context of these restraints, such a practice might be restrictive of competition.⁷⁶

There is a danger of an abuse of such a rating system, this can occur either by manipulated ratings or by favoring some suppliers over others. The problem of manipulated or fake ratings does not seem to be a big issue for Uber, as users have to rate each other before engaging in the next transactions. Rating each other without a real-world transaction is also not possible. This solves the problem that users might be deterred or discouraged to leave negative reviews, on the contrary, as all reviews happen anonymously, users are encouraged to leave negative reviews due to the easy user interface. The problem of “inflated ratings” can therefore be avoided to a certain extent.

On the other hand, it might become problematic, if the platform distinguishes between its service providers on the platform. This might happen e.g. by distinguishing between “standard agents” and “premium agents”, where the premium agents pay a certain fee to the platform to be favored over standard agents (Newman, 2017, p. 57). Currently, there is no differentiation between drivers on the platform, there is however a difference between the professionalization between drivers. Some drivers drive part time to supplement their income, whereas others use this as a full-time earning opportunity. Given the gig economy becoming more and more professionalized, this is exactly the kind of distinction between standard and premium agent, just in a different form (Ranchordas, 2017, p. 9). Such a distinction is only solved once a driver has accumulated

⁷⁵ *Stergios Delimitis*

⁷⁶ *Ibid* para 23.

enough transactions on the platform, without these transactions, he is facing a severe disadvantage compared to the established drivers (Federal Trade Commission, 2016, p. 43). If a driver does not drive very often for Uber, a few bad or unfortunate ratings have a larger impact on a driver's overall rating than for a driver who drives every day. The few bad ratings might decrease the overall rating to a point, where a driver faces exclusion. The more a driver is using Uber, the more ratings he can collect and the more he is relieving himself from this pressure. Even though a driver is not paying a fee to the platform, the constant use of one platform makes him a "premium" driver compared to the ones that only drive occasionally or for multiple platforms simultaneously. Those drivers do not have the amount of overall ratings to counter a few bad ratings and thus face a likelier chance of exclusion.

For a driver, this means he needs to continue to use the Uber app to maintain his status as a premium agent. By this, Uber raises the barriers to entry for other platforms such as Lyft. A driver, more focused on his rating so he can stay on Uber, is less likely to join Lyft. Such a restraint of the driver is directly mentioned in the Vertical Guidelines, which mention the anti-competitive effect of other participants in the market.⁷⁷ Without new drivers, a different platform is less likely to grow and to become a serious competitor of Uber. In some gig economy markets such as Airbnb, a new entrant is able to compete with lower prices, but in the Uber case this is only possible by offering a lower fare than the other drivers. This leads to drivers rather staying on Uber to keep their rating up instead of considering alternatives such as Lyft.

The theory of harm comes from this reality, a driver is disincentivized from using other platforms, which prevents the emergence of new platforms. The practice of driving for multiple platforms at the same time is called multi-homing. Is reducing the incentive to drive for other platforms by the rating system enough to find a violation of competition law? Very likely, an effects analysis is necessary to come to a final conclusion, especially because a driver IS able to drive for multiple platforms simultaneously. A driver can then choose to either accept a ride from Uber or Lyft, an analysis of multi-homing shows that it increases overall welfare compared to single-homing (Liu,

⁷⁷ Vertical Guidelines (n 33) para 100.

Loginova, & Wang, 2017, p. 12). However, once all drivers switch to multi homing, this results in a prisoner's dilemma with the end result of a decrease in overall welfare (Bernstein et al., 2019, p. 28). For a single driver, multi-homing is more beneficial, as he can choose between the platforms and maximize his utility. However, once all drivers switch to multi-homing, Bernstein et al (2019) show that the platforms will adjust to the new reality and the equilibrium price decreases, which leads to less driver participation, that ultimately outweigh the pricing gains by the consumer.

5.2. Efficiencies of the rating system

By using a trust system, a service provider is able to give customers a quality promise which in other markets is given through brand reputation (Federal Trade Commission, 2016, p. 30). Such trust is established even before a driver even conducts his first ride. When registering with Uber, the company checks if the driver holds a valid driver's license or his criminal record. Through such systems, the platform is able to control who is able to access it and can signal to the users that the service providers have been properly checked beforehand. This way, the platform might encourage more people to sign up for it, as the platform instead of the individual service provider is able to signal quality (Federal Trade Commission, 2016, p. 34). The larger a platform gets, the more attractive it becomes for more members to sign up, increasing the value of the platform (Evans & Schmalensee, 2012, p. 8). The rating system on the other hand is then used to encourage members to stay and use the platform.

Such a practice brings tangible efficiencies. The platform itself might be quicker to respond to complaints than the traditional way through the public sector (Evans, 2012, p. 1219). Sometimes, bad behavior on the platform might not even be remediable through public law, the trust mechanism therefore is able to cure regulatory failures better and quicker than going through a traditional public law investigation (Evans, 2012, p. 1219). As long as the review mechanism is transparent, Evans (2012, p. 1247) suggests that governance system of platforms are not anti-competitive, as long as the rules are not applied and the anti-competitive effects do not outweigh

the benefits. Excluding potential people from the platform to protect the other users might therefore be an objective justification, however, if that trust system is abused to exclude people from participating in the market, it becomes problematic. Yet, research shows that especially in a platform business, reputation systems are more effective than in other areas (Federal Trade Commission, 2016, p. 38).

6. The road ahead and concluding remarks

The market for short distance transportation is one of the most heavily regulated industries. Many of the current regulations stem from a time where smartphones, computers and the internet did not exist yet. They were aimed at curing market failures existing at the time, with the most prominent being minimal safety standards (Geradin, 2015, p. 7). Unfortunately, one of the biggest downfall of these regulations is that they created huge barriers of entry (Geradin, 2015). In many cities, the short distance transportation business, excluding public transport, is almost exclusively offered by taxis. In order to achieve regulatory approval, taxis need to carry a license. Licenses are limited in order to enable drivers to earn a living and to prevent a race to the bottom. A result of this limited amount of supply is that it drastically reduces the incentive of those holding a license to innovate (Lobel, 2016, p. 120). The fact that licenses are incredibly expensive further puts pressure on those holding one to recoup their investments (Crespo, 2016, p. 97). Uber entered this highly regulated market and sparked an outcry of critique. Taxi companies and lobbyists argued that Uber should be regulated the same way they are, claiming Uber is unfairly competing with them and escaping regulation (Geradin, 2017, p. 17).

Looking into the market that Uber penetrates, it's a significant improvement over the status quo. Using Uber is arguably more convenient, more accessible, faster and cheaper compared to taxis. As much as this paper has condemned Uber for possibly violating competition law because it fixes prices, there is no doubt that the consumer is better off with Uber as a market player than without. Uber has opened up the market for short distance transportation. Yet, some clauses are problematic and especially the pricing is not only ancillary, but a severe restriction of competition.⁷⁸ While the main focus of this paper was on the pricing, the rating system is a practice that is not only relevant for Uber, but for the gig economy in general. While using it in different forms, other platforms also make use of a rating system to ensure quality and safety. This is something both the regulator and other, non-gig economy firms could pick

⁷⁸ *MasterCard* (n 71), para 89.

up, as it arguably offers better monitoring and faster enforcement (Lobel, 2016, p. 153). As long as the rules of such a system are consistent and transparent, the efficiencies might outweigh the harms (Evans, 2012).

This paper aims to contribute to the understanding of Uber's practices in light of competition law. It brings forward three central contributions. All three of these contributions help us to draw a clearer picture when examining Uber. This paper first explains the obstacles if we wish to apply competition law. The matters of employment and agency stand out. Many times, an Uber driver resembles a mixture between an employee and an independent contractor, he carries characteristics of either category. This paper has picked up on this debate and also highlighted the way in which CJEU jurisprudence is tending, clearly towards the finding of an employment relationship. In regard to agency, this paper has presented a different view, showcasing that an agency relationship is not unrealistic, however different in form than some authors suggest (Akman, 2019).

A finding of an agency relationship in the Uber case does not rule out the application of competition law, as agency agreements that are used to facilitate collusion are not exempt. This is where the second contribution is made, namely a development of the H&S doctrine under EU competition law. This paper has shown two distinct types of H&S cartels and analyzed how Uber can be categorized, drawing from the more developed case law in the US and in the UK. While the pricing brings significant efficiencies, the way the pricing works resembles fixed RPM, an object restriction which is most likely to be prohibited, despite the significant efficiencies.

Besides Uber's pricing, this paper has also presented a view on the review mechanism, a practice many times forgotten by scholars, as the practice seems much less harmful than the pricing. This paper has built upon the prior findings and shown a unique way to find a harm within the review system, when the system transforms into one with standard and premium agent. Under such a system, the platform might be incentivized to exclude the standard agents

in favor of the premium agent. Yet, at this moment, this does not seem to be the case, however this paper has uniquely highlighted how such harm might arise in the future.

Bibliography

Table of Cases

EU

Cases 56 & 58/64 *Établissements Consten SàRL and Grundigverkaufs-GmbH v. Commission* [1966] ECLI:EU:C:1966:41.

Case 48/69, *Imperial Chemical Industries Ltd. v Commission of the European Communities* [1972] ECLI:EU:C:1972:70.

Joined Cases 40–48, 50, 54–56, 111, 113 & 114/73 *Coöperatieve Vereniging Suiker Unie v. Commission*, [1975] ECLI:EU:C:1975:174.

Case C-161/84 *Pronuptia de Paris GmbH v. Pronuptia de Paris Irmgard Schillgallis*, [1986] ECLI:EU:C:1986:41.

Case C-234/89 *Stergios Delimitis v Henninger Bräu AG* [1991] ECLI:EU:C:1991:91.

Case C-357/89 *VJM Raulin v Minister van Onderwijs en Wetenschappen* [1992] ECLI:EU:C:1992:87.

Case C-41/90 *Klaus Höfner and Fritz Elser v Macrotron GmbH* [1991] ECLI:EU:C:1991:161.

Case C-49/92 *P Anic Partecipazioni* [1999] ECLI:EU:C:1999:356.

Case T-102/92 *Viho v. Commission* [1995] ECLI:EU:T:1995:3

Case C-266/93 *Bundeskartellamt v Volkswagen AG and VAG Leasing GmbH* [1995] ECLI:EU:C:1995:345.

Case T-352/94 *Mo Och Domsjö AB v. Commission*, [1998] ECLI:EU:T:1998:103.

Case T-41/96 *Bayer AG v Commission of the European Communities* [2000] ECLI:EU:C:2004:2.

Case C-67/96 *Albany International BV v Stichting Bedrijfspensioenfonds Textielindustrie* [1999] ECLI:EU:C:1999:430.

Case T-202/97 *Tate & Lyle plc, British Sugar plc and Napier Brown & Co. Ltd v Commission of the European Communities* [2001] ECLI:EU:T:2001:185.

Case C-22/98 *Criminal proceedings against Jean Claude Becu and Others* [1999] ECLI:EU:C:1999:419.

Case T-325/01 *DaimlerChrysler v. Commission* [2005] ECLI:EU:T:2005:322.

Case C-456/02 *Michel Trojani v Centre public d'aide sociale de Bruxelles (CPAS)* [2004] ECLI:EU:C:2004:488.

Case T-328/03 *O2 GmbH & Co. OHG v. Commission* [2006] ECLI:EU:T:2006:116.

Case T-99/04 *AC-Treuhand AG v European Commission* [2008] ECLI:EU:T:2008:256.

Case C-217/05 *Confederacion Espailola de Empresarios de Estaciones de Servicio. v. Cornpafia Espafiola de Petroleos SA* [2006] ECLI:EU:C:2006:784.

Case; C-90/09 *P General Química v. Commission*, [2011] ECLI:EU:C:2011:21.

Case 382/12 *P MasterCard Inc v European Commission* [2014] EU:C:2014:2201.

Case C-67/13 *P Groupement des cartes bancaires (CB) v European Commission* [2014] EU:C:2014:2204.

Case C-413/13 *FNV Kunsten Informatie en Media v Staat der Nederlanden* [2014] ECLI:EU:C:2014.

Case C-74/14 *Eturas UAB and Others v Lietuvos Respublikos konkurencijos taryba* [2016] ECLI:EU:C:2016:42.

Case C-434/15 *Asociación Profesional Elite Taxi v Uber Systems Spain SL* [2017] ECLI:EU:C:2017:981.

UK

Argos Ltd, Littlewoods Ltd v Office of Fair Trading [2004] CAT 24.

JJB Sports plc v OFT [2004] CAT 17.

Aslam & Ors v Uber BV & Ors [2016] EW Misc B68 (ET).

US

Interstate Circuit v. United States, 306 U.S. 208 (1939).

Toys“R”Us v. Federal Trade Commission, 221 F. 3d 928 (7th Cir. 2000).

EU Regulations

Commission Regulation (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices [2010] OJ 2 102/01

EU Commission notices and guidelines

Communication from the Commission - Guidelines on the application of Article 81(3) of the Treaty [2004] OJ 1 101/97.

Communication from the Commission – Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal cooperation agreements, O.J. 2011, C 11/1.

Guidelines on Vertical Restraints [2010] OJ 1 130/1.

Commission Decisions

AT.39964 - Air France/KLM/Alitalia/Delta case

Books and Chapters in edited books

Kenner, J. (2019). Uber drivers are ‘workers’ – The expanding scope of the ‘worker’ concept in the UK’s gig economy. In J. Kenner, I. Florczak, & M. Otto (Eds.), *Precarious Work. The Challenge for Labour Law in Europe* (pp. 1–19). Cheltenham, United Kingdom: Edward Elgar Publishing.

Townley, C. (2007). The Concept of an ‘Undertaking’: The Boundaries of the Corporation — A Discussion of Agency, Employees and Subsidiaries. In G. Amato & C. Ehlermann (Eds.), *EC Competition Law: A critical assessment* (pp. 1–23). Oxford, England: Hart Publishing.

Wish, R., & Bailey, D. (2018). *Competition Law* (9th ed.).

Journal Articles and Working Papers

Akman, P. (2019). Online Platforms, Agency, and Competition Law: Mind the Gap. *Fordham International Law Journal*, 43(2), 209–319.

Akman, P., & Sokol, D. D. (2017). Online RPM and MFN Under Antitrust Law and Economics. *Review of Industrial Organization*, 50(2), 133–151.

Anderson, M., & Huffman, M. (2018). The sharing economy meets the Sherman Act: Is Uber a firm, a cartel, or something in between? *Columbia Business Law Review*, 2017(3), 859–933.

Bailey, D. (2008). “Publicly Distancing” Oneself from a Cartel. *World Competition*, 31(2), 177–203.

Bennett, M., & Collins, P. (2010). The Law and Economics of Information Sharing: The Good, the Bad and the Ugly. *European Competition Journal*, 6(2), 311–337.

Bennett, M., Fletcher, A., Giovannetti, E., & Stallibrass, D. (2010). Resale price maintenance: Explaining the Controversy, and Small Steps Towards a More Nuanced Policy. *Fordham International Law Journal*, 33(4), 1278.

Bernstein, F., DeCroix, G. A., & Keskin, N. B. (2019). *Competition Between Two-Sided Platforms Under Demand and Supply Congestion Effects*.

Cramer, J., & Krueger, A. B. (2016). Disruptive change in the taxi business: The case of Uber. *American Economic Review*, 106(5), 177–182.

Crespo, Y. (2016). Uber v. Regulation: “Ride-Sharing” Creates a Legal Gray Area. *University of Miami Business Law Review*, 25(1), 79–110.

Daskalova, V. (2017). *Regulating the new self-employed in the Uber economy: what role for EU competition law? TILEC Discussion Paper 2017-28*.

- Davidov, G. (2017). The Status of Uber Drivers: A Purposive Approach. *Spanish Labour Law and Employment Relations Journal*, 6(1–2), 6-15.
- Edelman, B. G., & Geradin, D. (2016). Efficiencies and Regulatory Shortcuts: How Should We Regulate Companies like Airbnb and Uber? *Stanford Technology Law Review*, 19(2), 293–328.
- Evans, D. S. (2012). Governing Bad Behaviour by Users of Multi-Sided Platforms. *Berkeley Technology Law Journal*, 27(2), 1200–1250.
- Evans, D. S., & Schmalensee, R. (2007). The Industrial Organization of Markets with Two-Sided Platforms. *Competition Policy International*, 3(1) .
- Evans, D. S., & Schmalensee, R. (2012). *The Antitrust Analysis of Multi-Sided Platform Businesses*.
- Federal Trade Commission. (2016). *The “Sharing” Economy Issues Facing Platforms, Participants & Regulators*.
- Freedland, M., & Prassl, J. (2017). *Employees, Workers and the “Sharing Economy” Changing Practices and Changing Concepts in the United Kingdom Oxford University Legal Research Paper No 19/2017*
- Geradin, D. (2015). Uber and the Rule of Law: Should spontaneous Liberalization be applauded or criticized? *Competition Policy International*, 11(1).
- Geradin, D. (2017). *For a Facts-Based Analysis of Uber’s Activities in the EU: Addressing Some Misconceptions. TILEC Discussion Paper 2017-19*.
- Harrington Jr, J. E., & Harker, P. T. (2018). *How Do Hub-and-Spoke Cartels Operate? Lessons from Nine Case Studies*.
- Harris, SD. & Krueger, AB. (2015). *A Proposal for Modernizing Labor Laws for Twenty-First-Century Work: The “Independent Worker” Hamilton Project, Discussion Paper No. 2015-10*.
- Heinemann, A., & Gebicka, A. (2016). Can computers form cartels ? About the need for European institutions to revise the concertation doctrine in the information age. *Journal of European Competition Law & Practice*, 7, 431–441.
- Klein, B. (2017). The apple e-books case: When is a vertical contract a hub in a hub-and-spoke conspiracy? *Journal of Competition Law and Economics*, 13(3), 423–474.

- Koenig, C. (2017). An Economic Analysis of the Single Economic Entity Doctrine in EU Competition Law. *Journal of Competition Law and Economics*, 13(2), 281–327.
- Kyprianides, G. P. (2012). Should Resale Price Maintenance be per se Illegal? *European Competition Law Review*, 33(8), 376–385.
- Lao, M. (2017). Workers in the “Gig” Economy : The Case for Extending the Antitrust Labor Exemption to Them. *UC Davis Law Review*, 51(4), 1543–1588.
- Lianos, I., Countouris, N., & De Stefano, V. (2019). Re-thinking the competition law/labour law interaction: Promoting a fairer labour market. *European Labour Law Journal*, 10(3), 291–333.
- Liu, Q., Loginova, O., & Wang, X. H. (2017). *The Impact of Multi-Homing in a Ride-Hailing Market*.
- Lobel, O. (2016). The Law of the Platform. *Minnesota Law Review*, 101(1), 87-166.
- Londoño van Rutten, R., & Buts, C. (2019). Hub and Spoke Cartels. *European Competition and Regulatory Law Review*, 3(1), 4–16.
- Malos, S., Vogelgesang Lester, G., & Virick, M. (2018). Uber Drivers and Employment Status in the Gig Economy : Should Corporate Social Responsibility Tip the Scales ? *Employee Responsibilities and Rights Journal*, 30(4), 239–251.
- Mandrescu, D. (2017). Applying EU competition law to online platforms: the road ahead - Part 1. *European Competition Law Review*, 38(8), 353–365.
- McCabe, A. (2012). The English Court of Appeal’s legal test for “hub and spoke” cartels - is it compatible with EU jurisprudence? *European Competition Law Review*, 33(10), 452–456.
- Means, B., & Seiner, J. A. (2016). Navigating the Uber Economy. *UC Davis Law Review*, 49(4), 1511–1546.
- Newman, J. M. (2017). Complex Antitrust Harm In Platform Markets. *CPI Antitrust Chronicle*, 1(2), 52–59.
- Nowag, J. (2018). When sharing platforms fix sellers’ prices. *Journal of Antitrust Enforcement*, 6(3), 382–408.
- Odudu, O. (2011). Indirect Information Exchange: The Constituent Elements of Hub and Spoke Collusion. *European Competition Journal*, 7(3), 205–242.

- Odudu, O., & Bailey, D. (2014). The Single Economic Entity Doctrine in EU Competition Law. *Common Market Law Review*, 51(6), 1721–1757.
- Orbach, B. (2016). Hub-and-Spoke Conspiracies. *Antitrust Source*, 15(4), 1-15.
- Passaro, N. A. (2018). How Meyer v. Uber could demonstrate that Uber and the sharing economy fit into antitrust law. *Michigan Business & Entrepreneurial Law Review*, 7(2), 259–282.
- Petit, N., & Henry, D. (2010). *Vertical Restraints under EU Competition Law: Conceptual Foundations and Practical Framework*.
- PricewaterhouseCoopers. (2014). *The sharing economy : how will it disrupt your business?*
- Ranchordas, S. (2017). *Peers or Professionals? The P2P-Economy and Competition Law*. University of Groningen Faculty of Law Research Paper Series No. 4/2018.
- Stemler, A. (2017). The Myth of the Sharing Economy and Its Implications for Regulating Innovation. *Emory Law Journal*, 67(2), 197-241.
- Todolí-Signes, A. (2017). The ‘gig economy’: employee, self-employed or the need for a special employment regulation? *Transfer: European Review of Labour and Research*, 23(2), 193–205.
- Uber Inc. (2015). *In Response to the “Sharing” Economy: Issues Facing Platforms, Participants, and Regulators*.
- Van Cleynenbreugel, P. (2012). *Single Entity Tests in US Antitrust and EU Competition Law*.
- van Doorn, F. (2009). *Resale Price Maintenance in EC Competition Law: The Need for a Standardised Approach*.
- Woo, C. P., & Bales, R. A. (2017). The Uber million dollar question: Are Uber Drivers Employees or Independent Contractors? *Mercer Law Review*, 68(2), 461–488.
- Zhang, A. H. (2013). Toward an economic approach to agency agreements. *Journal of Competition Law and Economics*, 9(3), 553–591.

Websites

Jagman. (2017, February 14). We can negotiate the fare. Retrieved June 27, 2020,
from <https://uberpeople.net/threads/we-can-negotiate-the-fare.141426/>.

Uber. (2012, February 1). Auto insurance to help protect you. Retrieved April 13, 2020,
from <https://www.uber.com/us/en/drive/insurance/>.

Uber. (2020, February 1). Partner Protection Insurance with AXA. Retrieved June 9, 2020,
from <https://www.uber.com/nl/en/drive/insurance/> Uber. (2012c). Safety for Drivers.

Uber. (2012b, February 1). Rating a driver. Retrieved July 1, 2020,
from <https://help.uber.com/riders/article/einen-fahrer-bewerten?nodeId=478d7463-99cb48ff-a81f-0ab227a1e267>