The cases of Airbnb and Uber – the challenges the collaborative economy business models pose for EU Competition Law

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1. INTRODUCTION

Pursuant to rapid technological growth and development and due to the fact that internet goods and services are not provided in the same, traditional, way anymore, we can see the emergence of new collaborative economy business models. The term collaborative economy is more widely referred to as ‘sharing economy’, but also ‘peer-to-peer economy’, ‘collaborative consumption’ or ‘demand economy’. In the thesis, the author uses the term collaborative economy, because this is the term used by the European Commission (hereinafter: the Commission) and in some parts the thesis refers to the most recent document issued by the Commission, namely the Communication on collaborative economy (hereinafter: the Communication).1

The main principle behind collaborative economy, which is sharing of personal assets, is not a new idea, but it was already present throughout the history.2 However, nowadays the problem arises because assets are not offered only to friends and family, but to everyone, resulting in new business models competing with traditional businesses. It is true that collaborative economy stimulates innovation, increases competitiveness, promotes start-up activities and therefore creates new economic opportunities, such as employment options or simply creating an extra income. Moreover, it is beneficial to consumers, because it creates diversified markets with broader choice, which results in lower prices for goods and services. Additionally, it promotes environmental sustainability. However, it is also argued that collaborative economy could be illegal and is posing unfair competition on traditional businesses, because new companies do not comply with the same rules and standards. Often it is seen as if the main competitive advantage new business models have over the traditional ones is exactly the lack of regulatory framework they would need to comply with.3

Collaborative economy is most widely spread through services sector, namely accommodation and transportation sector. Indeed, these are the sectors where companies like

2 I.e. bartering is practiced throughout the world since ancient times. See Pierre Goudin, The Cost of Non-Europe in the Sharing Economy (DG for Parliamentary Research Services 2016) 9.
3 Jana Valant, ‘Sharing Economy: They Come in Like a Wrecking Ball’ (Members’ Research Service, DG for Parliamentary Research Services 2016) 1-2.
Airbnb and Uber, as the largest examples of collaborative economy, operate. Uber is competing with taxi services in the transportation sector, while Airbnb is competing with hotels and other providers of short-term rentals in the accommodation sector. Because of the abovementioned issues, some of the EU member states (hereinafter: the MS) have extended existing, or amended, sectoral rules on such businesses, which has in some cases led to banning of such services altogether, claiming they constitute instances of unfair competition. Some of the Uber services were banned among German cities, in Brussels, France, the Netherlands, Spain and Italy. Airbnb is also facing difficulties operating, especially in cities such as Amsterdam, Barcelona, Berlin, Hamburg, Munich and Paris.

Following from the Eurobarometer Report and Public Consultations carried out by the European Commission, majority of EU citizens are aware of these new business models. While almost half of them are taking advantage of these opportunities, because they acknowledge the benefits derived, the number could be bigger, if it were not for the uncertainty connected to such services. Based on the aforementioned, it is clear that the collaborative economy is expanding and it has to be dealt with. Therefore, it is no surprise why this phenomenon is one of the EU’s priorities under both the Single Market Strategy and the Digital Single Market Strategy. For the same reasons, it is also addressed in this thesis. The central research question of the thesis is:

*Do existing legal frameworks prevent innovation by banning new business models like Airbnb and Uber without taking into account the efficiencies they might bring to the overall economy?*

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4 The Communication (n 1).
10 The Communication (n 1) 4-5.
This thesis focuses on the case studies of Airbnb and Uber because these two companies are still the most successful examples of collaborative economy, which is indeed mostly present in the transportation and accommodation sectors, as mentioned earlier. In order to answer the main research question, several sub-questions will be coined.

Firstly, one must answer the question what kind of business models do Airbnb and Uber use. This will be done in Chapter 2. Within this chapter, the notions ‘collaborative economy’ and ‘business model’ will be defined. Moreover, a business model framework will be selected and presented and the business models of Airbnb and Uber will be described through this framework. Following, efficiencies stemming from these business models will be summed up in the next subchapter. Despite all the benefits these business models provide for consumers and society as a whole, they are being declared illegal and banned from operating in the MS. This author believes that this is an instance of the phenomenon regulatory disconnect. Namely, regulations in force were adopted with traditional business models in mind and are thus outdated and not equipped to regulate new business models based on technology and innovation.

In order to prove that, it has to be answered whether regulation really falls behind innovation and does not take into account efficiencies. This question will be pursued from the perspective of the theory of regulatory disconnect. Chapter 3 will therefore present the theory and existing regulatory frameworks in the EU. To establish regulatory frameworks governing the business of Airbnb in section 3.2.1, the author will analyse ex ante regulation of ten MS, while for Uber, this will be done by looking at the decisions of courts. Due to the limited access and linguistic considerations, German courts’ judgements will be used to describe the measures in section 3.2.2. Against this background, the author will establish some common measures that authorities among the cities in the EU took in response to the rise of collaborative economy. Such measures, will then be analysed through the lens of regulatory disconnect in section 3.3. This time for both Airbnb and Uber, Germany will be used as a case study to show that the law falls behind innovation. This will be done by firstly, establishing German provisions based on which Airbnb and Uber were banned. And secondly, by analysing these provisions for efficiencies through lens of regulatory disconnect.

Based on the conclusion that existing regulations really do fall behind innovation and the Commission’s beliefs that collaborative economy must be promoted, because it positively
impacts the overall economy of the EU, the author will try to find solutions for these business models. Clearly, EU competition law rules, namely Article 101(3) TFEU cannot formally apply because there is no agreement in the sense of Article 101(1) TFEU. Also, invoking Article 102 TFEU does not seem like a viable solution, since the dominance is unlikely to happen in dynamic markets such as those on which Airbnb and Uber operate. However, the author believes that the rationale behind Article 101(3) TFEU is suitable to address the current situation, because it is taking into account efficiencies. Therefore, the proposed solution in Chapter 4 is an EU competition law-inspired solution, more specifically, Article 101(3) TFEU type of analysis is put forward. In order to support that, the author will firstly present Article 101(3) TFEU together with the applicable guidelines. Moreover, Article 101(3) TFEU type of framework that will be used to analyse new business models will be established. And lastly, Airbnb and Uber business models will be assessed for efficiencies, as the term is understood under EU competition law. The aim is to determine whether these businesses, indeed, create such efficiencies and thus Article 101(3) TFEU type of analysis could serve as a proposed solution for collaborative economy business models.

2. COLLABORATIVE ECONOMY BUSINESS MODELS

In order to make an in-depth analysis of the Airbnb and Uber business models as case studies of collaborative economy, the terms ‘collaborative economy’ and ‘business model’ have to be defined. Moreover, a business model framework will be selected and used for the following analysis of Airbnb and Uber’s activities. Lastly, the efficiencies stemming from the described business models will be summed up.

2.1 Collaborative economy

Even though it is not a new phenomenon, there is no clear definition of what collaborative economy is. Furthermore, not even all the EU institutions use this very notion, in fact it is used only by the Commission. On the contrary, the European Parliament (hereinafter: the EP), the European Economic and Social Committee and the Committee of Regions refer to this notion as a sharing economy. Also for the latter, there is no agreement over the definition. The EP defines sharing economy as: ‘a new socio-economic model that has taken off thanks

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13 The Communication (n 1) 4, 16.
15 Goudin (n 2) 9.
to the technological revolution, with the internet connecting people through online platforms on which transactions involving goods and services can be conducted securely and transparently”. The Commission, in its latest Communication, defined the notion in the following way:

‘Collaborative economy’ refers to business models where activities are facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods or services often provided by private individuals. The collaborative economy involves three categories of actors: (i) service providers who share assets, resources, time and/or skills – these can be private individuals offering services on an occasional basis (‘peers’) or service providers acting in their professional capacity (“professional service providers”); (ii) users of these; and (iii) intermediaries that connect – via an online platform – providers with users and that facilitate transactions between them (‘collaborative platforms’). Collaborative economy transactions generally do not involve a change of ownership and can be carried out for profit or not-for-profit.

For the purpose of the thesis, the notion collaborative economy together with the Commission’s definition will be used since, indeed, the Communication is the most recent document regarding the addressed issues and the author will in some parts of the thesis refer to this document.

Additional issue regarding the term collaborative economy is, whether it covers the same scope of activities as the term ‘sharing economy’ or any of the other terms currently in use. As it seems, it is an umbrella term for various different business models that may not serve the same purpose, operate under the same philosophies or in the same industry. However, the common denominator is the rationale of accessibility-based economic model. Instead of buying and owning an asset, consumers rather pay for the time they actually use the given assets, mostly services.

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17 The Communication (n 1) 3.
18 Collaborative economy or more precisely, collaborative consumption term is supposed to be acknowledged only after publication of the book Rachel Botsman and Roo Roger, What is mine is yours: The rise of collaborative consumption (Harper Business 2010).
19 Goudin (n 2) 7, 9.
As already mentioned, this economic model has been in use for quite some time in business-to-business (B2B) and business-to-consumer (B2C) markets, but it has started to change over the recent years. Mostly, it has become easier to use and it has spread to other markets as peer-to-peer (P2P) model. Such changes could be attributed to the following factors.\(^{20}\)

The main reason for the rapid growth of collaborative economy is definitely technological innovation. Digital platforms are nowadays the place where supply meets demand of consumers. Without internet, such platforms would not exist and without the mobile devices, accessing them would not be as simple and convenient as it is now. Moreover, the rise of social networks, related to the internet, has connected people in so called communities, which took over an active role in establishing what market needs and evaluating services that are delivered. Last, but not the least, such growth could not be achieved without the emergence and simplicity of online payment systems.\(^{21}\)

Moreover, following the financial crisis, increased unemployment rates and recent findings that assets are too many times underutilised, people started to spend their money more wisely and furthermore, they are even trying to earn an extra income using collaborative economy. Such mind-set is changing consumers in so called ‘prosumers’, meaning that they can at the same time use someone else’s services and offer their own.\(^{22}\) Additionally, by fighting underutilisation of already existing assets there is a lesser need for new ones. Consequently, this results in reducing waste and preserving the nature.\(^{23}\)

As is supported by the PwC study,\(^{24}\) Eurobarometer Report\(^{25}\) and Public Consultations,\(^{26}\) collaborative economy is spreading at a high pace. Although this creates numerous benefits, it also poses challenges, especially for the traditional businesses, that are fighting to survive. Policymakers are also challenged. The problems are particularly concerning for the EU, since they are resulting in the lack of a level playing field between businesses. While rules that are in force at the EU level in many instances cannot be applied to new forms of collaborative economy.

\(^{20}\) ibid 7.
\(^{21}\) ibid 12.
\(^{23}\) Goudin (n 2) 8.
\(^{25}\) TNS Political & Social (n 8).
\(^{26}\) Gawer (n 9).
economy, the MS are taking actions at national level. This leads to the lack of harmonisation and may distort the proper functioning of the single market, one of the main objectives of the EU.\textsuperscript{27}

2.2 Business model

In this section, the companies and their operations will be presented through the business model they use and this will be done based on predefined components. Following such a structure provides for a clearer overview of companies and makes it easier to compare them.

Everyone is talking about business models, yet there is no uniform definition. The first one to use this term was Michael Lewis. Since then, a number of authors have provided different definitions of business model. Some of them see it as a purely economic concept. They believe that what is important is, on the one hand, how the company makes revenues and, on the other hand, what is producing their costs. Others are of the opinion that companies’ operations, especially nowadays, are more complex and therefore business models must also include how companies are creating value.\textsuperscript{28}

Also, concerning the components to analyse a company’s business model, there are various possibilities to choose from. According to Slàvik and Bednár, notwithstanding the others, there are two business model concepts that are especially relevant. They take into account economic and value creation view and are complex enough to provide for a proper analysis of a company. The first one is four component business model by Johnson, Christensen and Kagerman from 2008. They believe that company’s business model is based on the value that company has to offer to customers and how it makes the profit. It is very important what kind of resources the company possesses and which are the activities it is carrying out. The other one is ‘business model Canvas’ by authors Osterwalder and Pigneur from 2009. It provides nine ‘building blocks’ to describe a company’s business model. In Slàvik and Bednár’s opinion, this is the most optimal choice, because the concept is: ‘…the most complex,

\textsuperscript{27} Goudin (n 2) 8.
analytical, flexible and general, so it can be used for research of companies in all the industries.’

Canvas (see Appendix 1) is generally considered to be the most comprehensive tool for describing a business model in literature and because new business models arising under collaborative economy are carrying out complex operations, this is the tool that will be used to describe Airbnb and Uber. Arising therefrom, for the purposes of the thesis, also the term business model will be understood as defined by Osterwalder and Pigneur.

The authors believe that in order to understand and compare different business models, we must first be united about the definition. According to them ‘a business model describes the rationale of how an organisation creates, delivers and captures value.’ Moreover, ‘the nine building blocks cover four main areas of a business: customers, offer, infrastructure and financial viability.’ In what follows, the nine building blocks will be described.

*Customer segments* is the first one. Customers are comprised of individuals as well as other companies on which the company in question wants to focus and create value for. There can be one or more customer segments and they may vary depending on the market. It is crucial for the company to recognise and determine which are the targeted customer segments. Only then can it study their needs and adapt a business model accordingly.

*Value propositions* correspond to customer needs. It comprises of products and services through which a company creates value for their customer segments. The most important concerning value propositions is the competitive advantage a company has over the others that attracts customers. Such advantages might be in a form of new products or services or just as an improvement of the existing ones.

Through *channels* a company interacts with customer segments. Firstly, channels enable a company to inform customers what products and services they offer and why they will create

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29 ibid 23-25.
32 Slávik and Bednár (n 27) 15.
33 ibid 20-21.
34 ibid 22-25.
value for them. Secondly, these are the means for purchasing and delivery of products and services to customers. And lastly, information on what can be expected from the company, if something goes wrong after purchasing a product can be communicated through these channels. On the one hand, such channels can be owned by the company itself and they can be direct or indirect. While on the other hand, they can be indirect partner channels.35

If the previous block was focused more on the means of creating an interaction with customers, the customer relationship block is concerned with what kind of relationship will that be. It mostly depends on the type of company and whether a company wants to attract new customers, keep the existing ones or increase the sales of their products and services.36 Revenue streams are ways through which a company makes money by offering their goods and services to selected customer segments. A company can generate revenue streams from each individual purchase or from ongoing payments and they can vary between different customer segments. Moreover, it can set the prices, namely it can opt for fixed pricing mechanism or dynamic one based on the market conditions.37

Key resources represent owned, leased or assets acquired from partners that are crucial in order for the company to carry out its operations. Such resources do not comprise of only physical assets and skilled people that work for the company, but also financial resources and intellectual assets that are becoming ever more important.38

Key activities display what a company predominantly does to create value. These differ depending on the type of company.39

Key partnerships include all the actors with whom a company cooperates, such as suppliers and partners. Companies usually decide to make partnerships to lower the costs through optimisation and economy of scale, to reduce risk and uncertainties related to their operations and to acquire resources and activities from others.40

35 ibid 26-27.
36 ibid 28.
37 ibid 30-33.
38 ibid 34-35.
39 ibid 36-37.
40 ibid 38-39.
Lastly, *cost structure* comprises of all the costs related to company’s operations. Based on this, companies can be more oriented towards saving costs, creating value or they are trying to achieve both. When describing this building block, fixed and variable costs and economies of scale and scope must be considered.  

These nine building blocks result in the so-called ‘business model canvas’ presented below. It is a visualisation tool and it displays how the building blocks intertwine.  

![Business Model Canvas](image)

*Source: Osterwalder and Pigneur (2010)*

### 2.2.1 Airbnb business model

Airbnb was founded in 2008 by Joe Gebbia, Brian Chesky and Nathan Blecharczyk. It is a US privately held company based in San Francisco, California. It is an online platform enabling local hosts and travellers to connect and fulfil their needs. There are more than 3,000,000 listings available on their platform that are spread through more than 191 countries and 65,000 different cities around the world. The fact that more than 150,000,000 guests have used Airbnb services and that its valuation reaches $30 billion, according to the last known information, indicate the popularity and success the start-up has achieved.  

Furthermore, in the late 2016, the company expended its services and launched Trips platform. Besides homes, this platform offers two additional components, namely ‘experiences’ and ‘places’. Through ‘experiences’ travellers are able to book activities offered by local hosts. These can be activities that hosts are enthusiastic about or they believe are typical for their city. ‘Places’ comprises of guidebooks, audio walks and meet ups. While there are already

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41 ibid 40-41.
42 ibid 44.
some guidebooks available, in which locals recommend travellers what to do and where to go, the other two components have not been launched yet.45

Below, the aforementioned and described nine building blocks will be used in order to present the business model of Airbnb. For a ‘business model canvas’ of Airbnb, refer to Appendix 1.

**Customer segments:** two main groups that Airbnb is targeting are hosts and travellers. A host can be anyone, from private persons to professional hospitality providers, such as bed & breakfast, hostels and others. The only prerequisite is to comply with hosting standards; additionally, businesses must offer spaces that provide a unique experience for travellers. Hosts can rent out their own extra spaces, they can become co-hosts, helping others or renting out others’ properties46 and since the end of 2016, they can additionally offer experiences.47 The other segment are travellers, that comprise of private and business travellers,48 who are making work- or leisure- related trips and need accommodation. Both sides need to register to the platform before using the services by making an account.49

**Value proposition:** Their platform is the core of value creation for Airbnb. It creates a place where hosts and travellers connect and establish a direct communication in order to fulfil their needs. The great benefit is that they can do this in a simple and flexible manner, since registering for the platform and listing a property is easy and free. Such an organisation reduces transaction costs and prices by eliminating unnecessary intermediaries. The competitive advantage of Airbnb is that almost everyone, who has an extra space, can be a host and therefore earn money, connect with other host in communities or simply meet new people. Moreover, they are free in setting the conditions and prices of bookings. The most important advantages they offer to travellers are lower prices and variety of choices. Firstly, they can find cheaper accommodation than in hotels. Secondly, the aim of some travellers might not be the cheapest prices, but to stay at unique places, such as castle, boat or villa. They might want to be accommodated at some special location, not an ordinary neighbourhood where most of the hotels are located or they would like to have special

amenities. Airbnb platform listings offer all of that, while offering them a chance to live like locals.50

**Channels:** for communication with customers, namely raising awareness of their services, Airbnb uses so called content marketing strategy. They are attracting customers through social media, like Facebook, Instagram, Twitter and YouTube. They believe in a good storytelling, which they promote by running a blog, through Airbnb Stories and different video content. As part of Create Airbnb, individuals can choose between colours, patterns and different shapes in order to create their own logo of the company. They also provide city guides, printed magazine and studies on economic impact of Airbnb.51 Furthermore, they are using the technique of referrals to gain new customers by offering existing ones travel credit, if a new customer related to the existing (referring) one makes a booking. Through word of mouth, a star rating52 and a review system, both users and hosts can evaluate the services. This reduces information asymmetry and builds trust.53 Services can be purchased through their webpage and application and payments can be made through various online methods while cash payments are strictly prohibited. This enables a platform to be a one-stop-shop, where customers can arrange everything they need and therefore lower the transaction costs.54 Additionally, Airbnb provide 24/7 customer support, including after the purchase of services.55

**Customer relationships:** are mainly maintained through aforementioned channels, where customers can co-create value of services through means of a review system and storytelling. Even though the idea behind platforms is to create self-service or automated services, Airbnb is trying to combine such a degree of flexibility with a sense of belonging. They created an online Community Center, where hosts can connect, find an advice or arrange to meet up. They are organising various events in different cities worldwide to stimulate and support communities in these cities. They promote movements such as Airbnb Citizen, which support social causes. In addition, they are building a trustworthy relationship with customers by

providing: verification ID process; 24/7 customer support; offering a guest refund policy in case of host cancellation, misrepresented information or unclean accommodation; a host guarantee in case of property damages caused by guests and host protection insurance program for body injuries or property damage claims from non-parties, both up to $1,000,000. And the greatest benefit is that all of these services can easily be accessed through Airbnb’s platform.

**Revenue streams:** registering and listing a property is free. Airbnb generates revenue streams from hosts and travellers, both private and businesses, by charging service fees. To each reservation made, they charge the host 3% of the price set as a service fee. Private travellers are usually charged higher service fees, 6-12%, but they vary based on the price set, duration of the booking or any other details of reservation. On the contrary, business travellers are charged 2-5% service fees, if there are more employees or they are staying for a longer period, the percentage is lower.

**Key resources:** the greatest asset of Airbnb’s business is undoubtedly their online platform, with a wide network of customers. It is also an underlying reason for all the efficiencies that Airbnb provides for its customers. It is a place where they create and sell value propositions, it is a channel through which they communicate with customers and create relationships with them. Also, online payment systems are one of the essential resources. Airbnb creates an escrow account and transfers the money to hosts only twenty-four hours after the check-in. Another asset is the brand. It stands for safe, trustworthy and unique customer experience and a sense of belonging to a global community. They have financial resources that they obtained through Venture Capital funding. Following Y Combinator, who was the first one to invest in Airbnb, they received financials from 44 other investors and according to the last known data the company was valued at $30 billion. Furthermore, human resources, like technologically skilled, marketing, management and design professionals, are a very

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59 ‘Airbnb Business Model and How Does Airbnb Make Money?’ (n 43).
important asset for Airbnb. At this point, it has to be noted that accommodations listed through their platform are not their resources, because they are property of the hosts.⁶²

**Key activities:** one of the most important tasks is to maintain and develop a platform. Moreover, they are creating a global community of Airbnb customers, therefore trying to attract new people (broaden their network) and provide an even better experience for the ones who already joined. Besides that, they are focused on advertising their services and to further develop them (i.e. launching Trips platform).⁶³

**Key partners:** since Airbnb has been founded, they have entered into numerous partnerships. They have made partners with local governments trying to agree on regulation, investors, payment system merchants and others. Each of the partnerships signal a collaborative culture behind the company and are an important step for the brand and the community around it. Some of the partnerships can be summarized by their agenda, namely partnerships serving the public, building the brand, connecting communities and saving the environment.⁶⁴

**Cost structure:** comprises of costs related to maintenance and development of platform, marketing costs, costs related to sales and payments to their employees. Hosts are not employees of the company and assets are not owned by the company, which are one of the main reasons for lower prices of the accommodation.⁶⁵ They may also incur some insurance or legal costs based on support they offer for customers.⁶⁶

2.2.2 *Uber business model*

Uber Technology, Inc. was founded in 2009 by Travis Kalanick and Garrett Camp. It is a US privately held company based in San Francisco, California. It is a technological company connecting different users through their platform in order to satisfy their needs. The company

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⁶⁵ “Business Model Canvas For Airbnb” (n 62).

operates in more than 81 countries in the world covering more than 657 different cities.67 After only eight years, Uber has managed to reach an estimated value of $68 billion in 2016.68 While the company started out as an intermediary connecting people regarding transportation services, they expanded their operations to logistics services later on. Nowadays, thus, there are two different sectors in which Uber operates. However, it has to be stressed, that they are not providing transportation or delivery services themselves, they are only acting as an intermediary connecting different users of their platform.69 Regarding transportation services, they are connecting drivers and riders through their app. They provide wide range of possibilities for riders to choose from, each of these structured to satisfy different needs of their users. Moreover, concerning delivery services, they provide UberEATS and UberRUSH. The first one was launched in 2014. It enables people to order food from partnering restaurants that are then delivered by Uber drivers, in this case called delivery partners.70 A year later, UberRUSH was launched in order to make local deliveries easier. In this case, Uber partnered up with different businesses and they are connecting them with drivers, who then make a delivery.71

Since this thesis focuses on Uber as a company acting in the transportation sector, only Uber’s transportation business model will be described through nine building blocks. For the Uber business model canvas, refer to Appendix 1.

**Customer segment:** there are two segments which Uber calls ‘drivers-partners’ and ‘riders’. A rider can be anyone older than 18 who owns a credit card, since cash payments are not possible. In order to use the services, riders need to create Uber account and download the rider app.72 Rider customer segment can be further divided into users who want a luxury ride, the ones who want their ride to strike precise balance between price and comfort and the ones that are willing to share the ride with other people in order to pay the lowest price.73 As for

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driver-partners, they need to fulfil more requirements before being able to use Uber’s services. They need to download the driver app. They need to own a car that is one of the approved models by Uber and fulfil other conditions set out on their webpage. In case they do not have a car, Uber can connect them to leasing companies that provide properly equipped cars. Additionally, they need to fulfil some other conditions, which differ depending on the country and the city of work.\textsuperscript{74} Also, driver-partners segment consists of different drivers, namely professional taxi drivers and other people, who want to use Uber services to earn an extra income.\textsuperscript{75}

\textit{Value proposition:} operating as a technology platform connecting different customer segments through their apps, is the main competitive advantage Uber has over its rivals. The reason lies in the simplicity of their services and the efficiency in connecting supply and demand for both segments. It reduces information asymmetries, transaction costs and it enables better allocation of resources. The users can request or accept the ride by only pressing a button and payment is automatically deducted from the rider’s account when they arrive at the agreed location. More so, Uber makes sure that services are provided anywhere at anytime. Riders are provided with a wide variety of options and flexibility of choices. They can select the best option for themselves, based on what car they want, what is the occasion and whether they want the cheapest ride or are willing to pay more, but ride in style. Depending on your location, Uber offers various options such as: ‘UberPOP’, where services are provided by non-licenced, non-professional drivers, ‘UberX’, where services are provided by qualified drivers with acceptable cars; ‘UberXL’, that is meant for bigger groups of people; ‘UberSELECT’, providing highly rated riders and cars; ‘UberBLACK’, ‘UberSUV’ and ‘UberLUX’ driven by the professional and experienced drivers. Moreover, they offer rides for different occasions, for example airport rides or business travel. It is also claimed to be safer, because riders do not have to wait outside on the street, but they can track the selected car’s location at any point of time before the pick-up and during the ride.\textsuperscript{76} Benefits for driver-partners are that also non-professionals can offer rides (UberPOP) and generate an extra income. Drivers are flexible in deciding when they will work and which ride requests they

\textsuperscript{75} ‘Uber Business Model Canvas’ (n 73).
will accept. They are also able to earn more if they decide to drive when the demand is higher, because of Uber’s ‘surge pricing’ algorithm.77

**Channels:** drivers and riders must download Uber’s app, which is the main channel of communication, including after the purchase. Also, very important channels are word of mouth and social media, where Uber posts information on new offers or special events they are preparing. Already at the very beginning, Uber had a good understanding of their targeted customers, therefore they provided their services at different restaurants and bars in the cities and offered some discounts for rides from sports events. On other occasions, they connected with organisers of different events and made partnerships with well-known companies and businesses whose customers were also Uber’s potential customers. Additionally, they launched some especially attractive services such as delivery service by mariachi-band in San Francisco or pick up service by motorcycle in Paris.78

**Customer relationships:** are established through automated services. As mentioned before, the whole process is conducted through the app, without any real contact with people from the company. The goal is to make the use of their services as easy and convenient as possible, therefore reduce transaction cost related to purchases. In addition, Uber is establishing personal relationship through personal assistance provided regarding their client’s safety. Besides the safety actions customers can undertake themselves, they are providing 24/7 customer support and rapid response in case of any concerns. They are building trust and encourage customers to co-create the relationship through review system giving an anonymous feedback on the services.79 Additionally, through well-known companies, Uber is trying to establish a relationship with its customers on the basis of the same values.80 However, drivers are the ones who get most contact with riders, so the overall experience of the latter highly depends on the relationship they manage to establish among each other. Even though drivers are not company’s employees, they must comply with certain conditions. Uber runs a background check on them and the review system is used in order to single out good quality drivers, who will build a good relationship with customers and therefore, promote Uber as a company.81

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78 ‘Uber Business Model Canvas’ (n 73).
80 ‘Uber Business Model Canvas’ (n 73).
**Revenue streams**: are generated through commission that Uber charges for each payment made by riders. There are two possible revenue streams. Normally, the payment is determined upon time and distance of the travel, any time that driver needed to wait for rider and taxes charged depending on the country. The amount deducted by taxes is the basis for Uber’s commission that can vary from 5-20% (usually 20%). However, in special cases based on the ‘surge pricing’, Uber can earn even more and so can the drivers. They developed an algorithm that raises prices whenever the demand for rides is a lot higher than supply. Following, surge pricing algorithm is included in the regular equation making the baseline amount, from which Uber charges its commission, higher. At the same time travellers can benefit from this algorithm by not taking rides when demand is too high. 82

**Key resources**: the main resources are definitely technical ones. Platform enables communication between drivers and riders and the two algorithms ensure its proper functioning. While the ‘surge pricing’ algorithm adjusts the relationship between supply and demand and associated prices, the routing algorithm ensures that the services are provided within the shortest time possible. Both contribute to the pricing efficiencies of Uber services.83 Moreover, Uber cannot operate without drivers, because the company does not own the cars itself, but they are not their employees. Uber is using private capital to operate their services, which is yet another reason for the ability to charge lower prices.84

**Key activities**: with platform being its main asset, Uber’s key activity is to maintain and develop the platform together with algorithms. Furthermore, they must make sure that the sufficient number of drivers sign up in order to meet the demand and this is partially achieved through marketing of their services. With successful marketing strategy, they are widening the network of both customer segments and therefore fulfilling their mission to provide transportation for everyone and everywhere.85

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85 Oakley (n 83).
**Key partnerships**: it has to be noted that, even though Uber calls drivers their driver-partners, they are still one of their customer segments following from the Terms of Use, therefore cannot be considered falling under the key partnerships segment.\(^86\) However, Uber is making partnerships with third party providers that are essential for the proper functioning of the platform. These partners comprise of providers of payment services, mapping data like company deCarta, joint venture with Toyota in order to lease cars to drivers, start-up Geometric Intelligence for improving navigation and others.\(^87\)

**Cost structure**: main costs are incurred by the Uber’s technological assets, namely for maintaining, developing and designing a proper use of platform, by marketing services, especially when launching its operations in a new city and for payments made to their driver-partners.\(^88\) Based on the number of employees, their salaries must add to a substantial amount of costs as well.\(^89\)

2.3 Efficiencies

Following from the analyses on how Uber and Airbnb business models operate, it can be concluded that these companies bring a wide range of efficiencies not only for customers, namely service providers and users, but also for incumbents. Efficiencies are created due to the fact that companies operate as technology platforms through which they facilitate all of the related transactions.\(^90\) Consumer efficiencies described under both business models can be summed up in following categories:

*Transaction costs efficiencies*

Technology platforms facilitate all the transactions through the platform (search, payment and evaluation). That makes it easier for service providers and users to connect and it eliminates costly procedures and intermediaries. It also establishes direct communication between them,

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\(^{88}\) Oakley (n 83).

\(^{89}\) ‘Crunchbase Uber’ (n 87).

which makes it easier to use the services. These features make use of the services faster, simpler and more certain.91

Pricing efficiencies
Technology platforms make use of dynamic pricing. They are able to adjust prices due to the timely information about market conditions and through direct communication channels they can pass this information to the consumers.92 Moreover, lower prices stem from the lower capital inputs. Businesses do not own assets, but they exploit private capital, namely assets already owned by the service providers (properties, vehicles) for commercial purposes. Additionally, these assets come in a different form (i.e. different vehicle models) or are provided at different locations (i.e. they are spread around the cities, not just centred in the prestige areas), which allows for lower prices.93

Allocative efficiencies
Because of the simplicity related to the online platforms, more people have the possibility to make their resources available and resources are being offered more often, even if they are available only for a short period of time. Possibility to book and to adjust the booking anywhere at any time, makes the use of services faster and therefore cheaper. It is also argued that people may invest more in special resources, contributing to the overall economy, because they will be able to better exploit them through platforms.94

Information efficiencies, reputations and accountability
Online platforms gather all the information regarding services offered, including user evaluation of such services, at one place. This eliminates information asymmetries, creates trust and makes it easier for customers to assess which services are the most suitable for them. It also provides valuable information that allow platforms to maintain certain level of quality. These mechanisms serve both sides as highly needed incentives and possible remedies.95

In addition to all of that, even incumbents can benefit from the efficiencies. They can exploit the existence of online platforms and create one themselves, or make use of the wide range of

91 ibid 3-4.
92 ibid 7-8.
94 Edelman and Geradin (n 90) 4-6.
95 ibid 6-7.
technological improvements in any other way that suits them best. Furthermore, multi-homing is allowed, meaning that service providers and users can exploit online platforms and traditional mechanisms at the same time. They can offer services through their own platform as well as on someone else’s and therefore, benefit from the efficiencies platforms bring. Lastly, they can make use of the dynamic pricing mechanisms. It is possible in most of the sectors and it can be facilitated through platforms or through electronic contracting environments.  

It has to be stressed that the notion efficiencies, stemming from innovative business models as they are presented here, is not the same as the notion efficiencies under EU competition law, which will be addressed and used as an assessment framework in Chapter 4. In the Guidelines on the application of Article 81(3) of the Treaty (hereinafter: the Guidelines), the Commission categorised efficiencies in two broad groups, namely cost efficiencies and qualitative efficiencies, which are based on wider choice or improved products. It also declared that objective of the EU competition rules is ‘to protect competition on the market as means of enhancing consumer welfare and of ensuring an efficient allocation of resources’. Regardless of the differences, there are clear overlaps between the business models and the notion efficiencies under Article 101(3) TFEU. Taking into account Airbnb and Uber business models, the author observed overlaps in connection with cost and allocative efficiencies that are already obvious from the classification and the objective pursued by the Commission, as well as overlaps in qualitative efficiencies, since the main value proposition of new business models is delivering broader choice of better products while promoting innovation. Indeed, these overlaps are the basis enabling the author to do Article 101(3) TFEU type of analysis under Chapter 4. 

The efficiencies pointed out in this chapter will be included in the analysis under Chapter 3.3 to see whether they are taken into account under the existing regulatory frameworks. The author foresees that this is not the case, since the adoption of the existing regulations was based on traditional business models and is therefore outdated and not equipped to regulate innovation. For these reasons, a model to address this mismatch under an EU competition law-inspired analysis will be proposed in Chapter 4. Seeing the aforementioned overlaps, it

96 ibid 8-11.  
98 ibid paras 13, 33.
will be assessed whether the same benefits, stemming from innovative business models as presented here, could be considered and assessed as efficiencies under the Article 101(3) TFEU.
3. EXISTING REGULATORY FRAMEWORKS AND COLLABORATIVE ECONOMY

In this chapter, the author will examine whether regulation (to be) imposed on the business models described above can keep up with the technological innovation on which they are based. For answering this question, the theory of regulatory disconnect will be used as a lens to analyse current regulatory frameworks applied to collaborative economy business models.

3.1 Theory of regulatory disconnect

While it is undoubtedly true that technological innovation is one of the main reasons and drivers behind collaborative economy, there are uncertainties as to what challenges it poses on the regulators and how could existing regulation stay relevant in this high paced environment. ‘If law and technology are to work together to improve the basic conditions of human social existence, this presupposes a regulatory environment that supports the development, application and exploitation of technologies that will contribute to such an overarching purpose, an environment properly geared for risk management and benefit sharing’.\(^9^9\)

Regulatory environment is set of signals on how people should act in order to be seen as acceptable.\(^1^0^0\) It encompasses law, as the narrowest concept, regulation and governance, as the broadest and non-governmental regulatory concept.\(^1^0^1\) Further assessment will leave out non-governmental actions (governance) and will focus on regulation as ‘”deliberate state influence”, extending to “all state actions that are designed to influence business or social behaviour”’.\(^1^0^2\) According to Brownsword and Goodwin,\(^1^0^3\) an adequate regulatory framework must: take into account prudence and precaution, pursue legitimate objectives in a legitimate manner, be effective and fit-for purpose and must be connected. Failure to fulfil the last prerequisite is called a ‘regulatory disconnect’ in European law and technology literature.

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\(^1^0^0\) Brownsword and Goodwin (n 99) 6.

\(^1^0^1\) Brownsword and Goodwin (n 99) 26; Brownsword and Somsen (n 99) 11.

\(^1^0^2\) Anna Butenko, 'Sharing Energy: Dealing With Regulatory Disconnect in Dutch Energy Law' (University of Amsterdam 2016) 8.

\(^1^0^3\) Brownsword and Goodwin (n 99) 46.
‘pacing problem’ in the US literature and ‘faster depreciation and obsolescence of legal solutions’ in legal literature.\textsuperscript{104}

Regulatory disconnect describes situations where regulation cannot evolve as fast as its targeted subject and therefore becomes disconnected. It may occur at different stages of the regulatory process. For instance, regulation can fail to connect to the new technology. Further, it might happen that regulation cannot maintain the connection with the technology, because it is evolving too fast. Or in the last scenario, after getting disconnected, regulation is not able to reconnect again.\textsuperscript{105} Moreover, there are different reasons for regulatory disconnect. Firstly, although unlikely, it may happen that new technologies would not fit under any of the existing regulatory arrays, therefore operating in a regulatory void. However, more common is that there would be regulatory gaps creating uncertainty, because technologies would not fit perfectly in one of the existing arrays. Secondly, regulatory framework may already exist, yet it is not clear how it should be applied to emerging technologies. Reasons for that are: technological development, arising situations where characteristics described in regulatory array do not match characteristics of the actual technology, different use of technology than anticipated, or a mismatch between the actual business model and the regulation to be employed on it. And thirdly, existing regulation can become outdated, because technology, behaviour and socio-economic norms have changed too much. Following, regulatory environment for upcoming technologies may be under- or over-reaching.\textsuperscript{106}

It has to be stressed that regulatory disconnect should not be considered sub-optimal \textit{per se}, but only if it results in regulatory failure.\textsuperscript{107} It is actually normal for the regulation to become disconnected, because it is based on reality and it exists to create legal certainty, not to constantly change. Therefore, when reality drastically changes because of i.e. technological innovation, disconnection follows as a logical consequence. Hence, the real issue is whether the reasons for disconnect can be identified and resolved in a timely manner. If not, this results in a regulatory failure. Regulatory failure describes the situation where regulators fail

\textsuperscript{104} Anna Butenko and Pierre Larouche, ‘Regulation for Innovativeness or Regulation of Innovation?’ (2016) 7(1) Law, Innovation and Technology 52, 66; Butenko (n 102) 9.
\textsuperscript{105} Brownsword and Somsen (n 99) 26.
\textsuperscript{106} Butenko and Larouche (n 104) 67-68.
\textsuperscript{107} Butenko (n 102) 8-9.
to provide an adequate regulatory environment to regulate the targeted subject, thus undermining the whole purpose of regulation.\textsuperscript{108}  

There are three different approaches as to how could a regulatory disconnect be solved, namely through horizontal, vertical and institutional dimension of disconnect. Horizontal approaches (there are three) have more support from the law and technology scholars and they suggest that the timing of regulatory intervention is of utmost importance. The first approach is ‘the precautionary principle, which presumes that when the expected magnitude of risks/harms of a specific innovation is large, such innovation should not be allowed unless it is proven to be safe.’\textsuperscript{109} Regulators need to balance between no regulation, which can result in risks for health and environment as well as loss of public trust and excessive regulation, which stifles innovation and deprives society of its benefits. Usually it results in overregulation. The second approach is risk-based regulation, which is ‘the prioritizing of regulatory actions in accordance with an assessment of the risks’, therefore not aiming at ‘securing compliance with sets of rules’\textsuperscript{110}. The third approach under horizontal dimension comprises of experimental or temporary legislation. Experimental legislation refers to ‘new temporary regulations (secondary legislation) with a circumscribed scope that, derogating [from the] existing law or waiving the observance of a number of rules or standards, are designed to try out novel legal approaches or to regulate new products or services as to gather more information about them’\textsuperscript{111}. And temporary legislation is ‘dispositions that determine the expiration of a law or regulation within a period determined beforehand’.\textsuperscript{112}  

The vertical approach is to adopt technology-neutral regulation. This is the case when regulators are regulating through general principles irrespective of the specific technology. Such an approach allows for the regulation to stay relevant (connected) for a longer period of time, taking into account nowadays high-paced development of technology. However, in order to apply technology-neutral regulation it has to be decided how specific is the actual innovative technology and in what kind of environment it will be used.\textsuperscript{113}  

\textsuperscript{108} Butenko and Larouche (n 104) 68-69.  
\textsuperscript{109} Butenko (n 102) 10.  
\textsuperscript{110} ibid.  
\textsuperscript{111} ibid 10-11.  
\textsuperscript{112} ibid 11.  
\textsuperscript{113} ibid.
There are various institutional approaches and they deal with the substance of regulation, the same as the previous two approaches, as well as with the form of regulation. The latter is addressed through ‘softer form of law’ approach that describes a governance process and through ‘co-regulation, where non-government actors take up regulatory roles on-par with the government’. Regulatory reforms and updates address the issue of regulatory substance. Regulatory reforms are new regulations forced by innovation and shift in norms and values of society. On the other hand, regulatory updates are only changes in regulation that reflect innovation, but there is no shift in the society’s beliefs. The last institutional approach is to use ‘a regulatory authority that is both independent and accountable’. It has the capacity to address horizontal dimensions of disconnect ‘by a layered approach to regulation’ and vertical one ‘by distinguishing between different levels of regulatory generality’.

Based on the fact that technological innovation is the main reason behind the emergence of new business models and because the efficiencies they bring stem from innovation, namely online platforms, the author considers the theory of regulatory disconnect to be the most suitable in addressing the issues dealt with in this thesis. The theory will be used to address the question, namely whether the efficiencies, stemming from new business models, are taken into account under the existing regulatory frameworks applied to collaborative economy. To answer this question, some common measures undertaken in response to collaborative economy by local, regional and national authorities within the EU will be presented. Furthermore, in Section 3.3, the author will use the example of Germany as a case study to determine whether the law really falls behind innovation. In order to prove that, German laws applied to collaborative economy will be established and evaluated under the theory to see, if there is a regulatory disconnect that results in regulatory failure. For the purposes of this thesis, regulatory failure is a situation where the EU policy and objectives support collaborative economy business models, but current regulatory frameworks do not.

3.2 Regulatory responses to collaborative economy business models in the EU

It can definitely be said that regulators and current regulatory frameworks were not prepared for such a wide-spread use of collaborative economy and emergence of various new business

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114 ibid.
115 ibid 12.
116 ibid 15.
models. A proof of that can be seen in accommodation as well as in the transport sector, where traditional businesses have taken a strong stance against online platforms. They are claiming that online platforms engage in unfair competition, because they do not comply with the same rules, resulting in regulatory asymmetry. The opposition has led to protests, lawsuits\(^\text{117}\) and in case of France, even criminal charges were brought upon two leading people of Uber France.\(^\text{118}\)

The clash between innovation and traditional business operations has resulted in enormous issues for the MS and the EU as a whole, thus authorities needed to act. At the EU level, there is no specific regulation on collaborative economy. Existing ‘regulation is applied at national, sector, regional and local level and much of this regulation is specific to the MS’,\(^\text{119}\) which was suggested as the best solution according to the European Union’s Committee of the Regions.\(^\text{120}\) These facts are the reason why regulatory frameworks regulating collaborative economy are so complex.\(^\text{121}\) If we only look at German city Berlin, laws that apply to short-term accommodation rentals are: Basic Law for the Federal Republic of Germany (‘GG’),\(^\text{122}\) The Constitution of Berlin (‘VvB’),\(^\text{123}\) German Civil Code (‘BGB’),\(^\text{124}\) Rental Law Improvement Act (MRVerbG),\(^\text{125}\) Regional Construction Act (‘BauOBln’),\(^\text{126}\) Regional

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\(^{119}\) The Communication (n 1) 19.

\(^{120}\) Committee of the Regions, ‘Local and Regional Dimensions of the Sharing Economy’ (Opinion) CDR (2015) 2698.

\(^{121}\) The Communication (n 1) 4, 19.


\(^{126}\) Bauordnung für Berlin (BauOBln) of 29 September 2005 (GVBl. S. 495), as last amended as of 17 Juni 2016 (GVBl. S. 361). Available at
Housing Surveillance Act (WoAufG Bln), Law Prohibiting the Misuse of Dwellings (ZwVbG), Regional Law on Administrative Fees (VGebO) and Federal Income Tax Act (EStG).

Irrespective of various different regulatory frameworks, the authorities among the MS are much more unified in their responses to collaborative economy business models. Actions that the authorities took can be divided into three different approaches. Some of the authorities have simply banned new business models. Others subsumed them under the existing regulatory frameworks that were designed for traditional businesses and forced them to comply, consequently depriving consumers of the benefits created based on innovation. And lastly, some of the authorities amended current rules or adopted new ones targeting collaborative economy business models.

Regardless of the approach taken, it can be concluded that there is a regulatory disconnect between current regulations and collaborative economy, which results in regulatory failure. Existing regulatory frameworks do not promote efficiencies stemming from innovative business models, nor do they promote innovation. On the contrary, they include protectionist measures, in favour of incumbents and public interest, which consequently hinders competition. All of this will be presented in the following subchapters taking a funnel-like approach.


132 Neelie Kroes, ‘Crazy Court Decision to Ban Uber in Brussels’ (Official Website of Vice-President of the European Commission Neelie Kroes 2014) <http://ec.europa.eu/archives/commission_2010-
First of all, in Section 3.2, it will be established what are the regulatory frameworks applied to collaborative economy in the EU. The reason behind that is to determine whether there are any commonalities among the measures that the authorities in different EU cities have undertaken. The author’s goal is to assess whether there is a pattern that applies to the EU in general and to identify the measures applied to collaborative economy. Moreover, any common measures recognised and pointed out will be then analysed under the theory of regulatory disconnect taking the German example as an entity for analysis. Germany is chosen due to the linguistic considerations and accessibility of sources. As a big jurisdiction and because there was a lot of sanctioning of new business models by the legislator as well as by the courts, Germany will be used as a case study under Chapter 3.3. to prove that law really falls behind innovation. In order to do that, the author will present current regulations and relevant provisions contained therein by considering previously identified common measures. Such provisions will be then analysed under the theory of regulatory disconnect for efficiencies.

In order to present the measures that the authorities have taken in response to Airbnb and Uber, different approaches will be taken. On the one hand, the case of Airbnb will be examined on the basis of information contained in three ‘impulse papers’ that constitute ex-ante regulation.\footnote{Rating Legis, ‘Impulse Paper on the Business Authorisation/Licencing Requirements Imposed Both on Peer-Providers and Platforms: Barcelona, Berlin and Amsterdam’ (2016) <http://ec.europa.eu/DocsRoom/documents/16948> accessed 21 May 2017; Edelman and Geradin (n 90) 1. \footnote{Guido Smorto, ‘Impulse Paper No.02 on the Business Authorisation/Licencing Requirements Imposed Both on Peer-Providers and Platforms in the Accommodation/Tourism Sector in Paris, Rome, Milan and London’ (2016) <http://ec.europa.eu/DocsRoom/documents/16949> accessed 21 May 2017; Sofia Ranchordás, ‘Impulse Paper Home Sharing in the Digital Economy: the Cases of Brussels, Stockholm, and Budapest’ (2016) <http://ec.europa.eu/DocsRoom/documents/16950> accessed 21 May 2017.} Uber, in turn, will be studied on the basis of its litigation history since the company has been heavily litigated over the past years. Therefore, the focus will be on courts’ decisions in different cities among the MS where Uber was banned.

3.2.1 Airbnb

For the purpose of establishing how collaborative economy in the accommodation sector is regulated, the author considered the information gathered from three different ‘impulse
papers’.\(^{134}\) Impulse papers were written by outside professionals upon the request of the Commission. The Commission ordered these papers ‘as part of its reflection about collaborative economy business models’.\(^{135}\) It has to be noted that the author’s data is limited to the cities included in those papers. These cities are: Amsterdam, Barcelona, Berlin, Brussels, Budapest, London, Milan, Rome, Paris and Stockholm. However, the author believes that this amount of information is sufficient to draw some general conclusions about common measures that were applied to collaborative economy business models in the short-term rental sector.

The first thing noted was that none of the cities adopted specific regulations on collaborative economy. Secondly, cities like Amsterdam and London have adopted more permissive approach, imposing mere limitations to Airbnb’s operations. Conversely, Barcelona and Berlin have taken a very restrictive approach, close to banning Airbnb operations altogether.\(^{136}\) Thirdly, regardless of different approaches at the MS or even local specific regulations, it was observed that rules which the authorities apply to collaborative economy are similar. Based on the last conclusion, the author summed up and organised some common rules in four categories shown below.

**Characteristics of a property.** Authorities are imposing various obligations and limitations on hosts such as: maximum rental period; maximum number of one host’s listings; maximum number of guests at the same time; only the whole apartment can be rented out; a room cannot be rented out, if it comprises of more than 40% of the whole surface of a given rental area; a room cannot be shared; residential property cannot be rented out; detailed description on how the accommodation must be furnished; amenities that have to be offered; additional services such as offering meals are prohibited or a rule is introduced that hosts must be present in the accommodation during the whole rental period.\(^{137}\)

**Administrative requirements.** Among others, hosts are obliged to: communicate renting out a property to the local authorities; obtain an authorisation and therefore fulfil imposed

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\(^{134}\) ibid.
\(^{135}\) Rating Legis (n 133) 1.
\(^{137}\) Rating Legis (n 133) 21-22, 28-29, 52, 63-65; Smorto (n 133) 12-15, 23, 46-49, 51-54; Ranchordás (n 133) 36, 38, 40-42, 64-67.
conditions and pay a fee; pay compensation (i.e. 5 euro per square meter per month); keep a host registry; obtain fire-safety permit or a home insurance.138

**Approvals and notices.** Hosts must: get a lessor’s permission for subletting; get homeowner’s association permission or notify neighbours. In some cases, subletting is forbidden in general.139

**Zoning regulation.** Zoning authorities may: prohibit hosts to rent out properties in the city or in the specific parts of the city or limit the number of permitted rentals in order to tackle shortage of homes and the rise of the rental prices for their citizens. In this sense, Airbnb can be prohibited on public policy grounds.140

It can be concluded that most of these measures are constructed in a way to impose certain requirements that Airbnb and its users have to meet in order to use the services. Such requirements hinder or, in some instances, even result in partial bans of Airbnb services which will be further shown below on the basis of the German example.

### 3.2.2 Uber

In contrast to Airbnb, Uber has been heavily litigated over the recent years. Therefore, under this section, the author considers the outcomes of litigation involving Uber to determine how collaborative economy is regulated in the transport sector. The findings are based on cities within the MS where Uber services were declared illegal and consequently banned. Such activities were observed to take place in: Belgium, France, Germany, Italy, the Netherlands

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138 Rating Legis (n 133) 23-25, 53-54, 56, 62; Smorto (n 133) 16-22, 41-42, 76-79; Ranchordás (n 133) 40, 53, 63-65.

139 Rating Legis (n 133) 55; Smorto (n 133) 24-25, 76; Ranchordás (n 133) 40, 50. Also, some other rules were observed that apply to collaborative economy, but are not necessarily hindering Airbnb operations. On the opposite, some of the taxation rules can be considered examples of good practice. I.e. in Amsterdam and Paris there are agreements between local authorities and Airbnb that the latter collects taxes, namely the amount of taxes is added to the total amount of rental fee, which makes the process of collecting taxes easier and more certain. See for Paris: Smorto (n 133) 24; for Amsterdam Rating Legis (n 133) 69. Furthermore, the ‘collaborative economy-friendly’ city of London has adopted Rent a Room Scheme allowing up to additional £4,250 a year to be tax free, thus allowing consumers to benefit from the new business models. On the separate note, regarding the outcome if hosts or companies do not comply with rules, sanctions are quite stringent. They can be in a form of high fines or in some cases even eviction is possible response, see Smorto (n 133) 79-80.

140 Rating Legis (n 133) 22, 29-30, 62; Smorto (n 133) 71-75; Ranchordás (n 133) 40.
and Spain. 141 The author believes that focusing on why Uber was prohibited from operating in these MS is the clearest way to present the existing regulations together with associated problems relating to Uber.

Because of the limited access to specific judgements, the author will first make some general observations on the type of regulations that apply to Uber based on academic articles. Furthermore, and in line with the analysis to follow in Section 3.3, the author will focus on the case of Germany. Actual decisions of the German courts will be used as an example of the measures and associated problems that apply to collaborative economy in this sector. Additionally, media articles regarding court proceedings involving Uber will be taken into account to establish if there are any similarities between the measures in Germany and in the other five MS that prevent Uber from operating.

Looking at what happened in different cities among the MS, the first thing that the author noticed was that there are no collaborative economy-specific regulations. Secondly, a general trend was observed, namely the courts qualified Uber as a transport service provider and not technology platform providing ‘connecting service’, as Uber identifies itself. 142 Therefore, Uber is regulated through local transport rules, i.e. in Germany Passenger Transport Act (Personenbeförderungsgesetz – ‘PBeFG’) 143 or in France Law on Taxis and Chauffeured Transport Vehicles – ‘Thévenoud Law’). 144

As already mentioned, Uber offers variety of different services among which UberPOP and UberX are the main ones provided in Europe. The differences between these two are in the profiles of drivers and cars they use. Under UberPOP ‘drivers are non-professional drivers, who have to satisfy a number of conditions set by Uber regarding their credentials and car, such as the ownership of a driving licence, a clean criminal record, proof of insurance for the

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142 Finck and Ranchordás (n 136) 49-50.


car, certificate of third party liability insurance, etc. Conversely, UberX ‘is a professional transportation service provided by licensed “private hire vehicle” (PHV) drivers operating licensed private hire vehicles’. To avoid any confusion, it has to be stressed that services provided under UberPOP in Europe are actually provided under the name UberX in other countries around the world. Additionally, in order to understand the following examples, UberBLACK ‘is essentially a luxury version of UberX’, except that a car needs to be a sedan or SUV.

Among the abovementioned services, UberPOP was the most scrutinised in the EU. This was based on the claims that it poses an unfair competition to taxi service providers, because it is not complying with the same regulations. In the case of Germany, UberPOP services were prohibited in Berlin and Hamburg through administrative court proceedings. These services were finally banned from operating throughout the country based on the legally binding injunction of the Higher Regional Court of Frankfurt am Main in the civil proceedings. All of the three courts decided that Uber is a transport service provider and not merely an intermediary and should therefore be regulated through the PBeF. More specifically, the court decided Uber runs an occasional transport service with motor vehicles on the basis of Article 2(1) in conjunction with Article 46(1) PBeF. Moreover, the courts in the mentioned cities prohibited UberPOP from operating based on violations of this act, namely because the drivers are not authorised for the transport of passengers as required under Article 2(1) PBeF.

The Higher Administrative Court of Hamburg justified the prohibition based on Article 3(1) of the Hamburg Public Order and Safety Law (‘HmbSOG’), which goal is to protect the

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146 ibid.
149 ibid.
153 Gesley (n 141). See also: Berlin (n 151); Hamburg (n 152); Frankfurt (n 153).
154 Gesetz zum Schutz der öffentlichen Sicherheit und Ordnung (HmbSOG) of 14 March 1966 (HmbGVBl. S. 77), as amended as of 8 December 2016 (HmbGVBl. S. 514). Available at <http://www.landesrecht-
public or the individual in order to prevent threats to public security or order. It further stated that the prohibition does not clash with the right to work and freely choose a profession under Article 12(1) GG, because it is justified by the overriding public interest. These interests are not protected when drivers are not authorised, meaning that they use non-insured vehicles for commercial use and that income taxes, social security contributions for the drivers and turnover taxes from business are not provided.\[156\]

The Higher Regional Court of Berlin-Brandenburg\[157\] justified prohibition of UberPOP according to the Article 17(1) of the Berlin Public Order and Safety Law (‘ASOG’),\[158\] which allows regional authorities and the police to take necessary measures to prevent danger to public security and order. Furthermore, the court stated that prohibition is lawful, because it protects taxi system, which is in the public interest, from the distortion of competition. Moreover, it protects passengers, who are not protected if drivers are not authorised. It elaborated on this notion, namely it stated that in order for drivers to be authorised they need to fulfil the conditions under Driving License Regulations (‘FeV’).\[159\] More specifically, they need to obtain an additional permit that is a driving license for passenger transport according to Article 48(1) FeV. Following from Article 48(4) FeV, such a license is issued, if drivers prove: their knowledge of the area of work, possession of permit to operate motor vehicles and the necessary skills. Additionally, they need to comply with Regulation on Operation of Motor Vehicles in Passenger Transport (‘BOKraft’).\[160\] Articles 28, 30(1) and 42 BOKraft set out requirements that vehicles must be subject to extensive technical inspection, they must have a taximeter and explicitly stated tariffs.


\[157\]See Hamburg (n 152).


In contrast, the decision of the Higher Regional Court of Frankfurt am Main\textsuperscript{161} was based on the civil suit against UberPOP. More specifically, the applicant claimed that UberPOP drivers violate Article 2(1) of the PBefG, because they are operating without authorisation and therefore pose unfair competition. The court’s decision was in line with the previous two judgements, UberPOP is a transport service provider, hence the drivers should be authorised. The court stated that authorisation means that vehicles are subject to technical inspection, insurance in favour of passengers in the event of an accident is provided and drivers are tested for reliability and suitability. Moreover, it said that the court’s intervention is justified based on public interests. In the case at hand, tax obligations are not fulfilled, social security systems are not in place and there is a lack of protection and safety of passengers. Finally, the court decided that UberPOP poses an unfair competition according to Article 3a of the Act Against Unfair Competition (‘UWG’)\textsuperscript{162} because it is competing with taxi service providers, but it does not comply with the same rules, namely it violates Article 2(1) of the PBefG requiring drivers to be authorised in order to provide services.

In addition to the example of Germany, taking into account available media articles, it can be seen that also in Belgium (Brussels),\textsuperscript{163} Italy,\textsuperscript{164} the Netherlands (Amsterdam),\textsuperscript{165} Spain (Barcelona, Madrid, Valencia)\textsuperscript{166} and France (Paris),\textsuperscript{167} UberPOP was subject to litigation based on unfair competition claims. Furthermore, in all of these MS, except for France, UberPOP was banned for operating without proper authorisation/permit. Derived from these facts, it can be concluded that one common measure through which UberPOP services are regulated is the need for authorisation/permit in order to transport passengers for commercial

\begin{footnotesize}
\begin{itemize}
\item[\textsuperscript{161}] See Frankfurt (n 153).
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purposes. This common measure will be analysed, in the next section 3.3, under the theory of regulatory disconnect.

In Germany, more specifically in Berlin, not only UberPOP, but also UberBLACK services were prohibited. The Berlin Higher Regional Court qualified UberBLACK as a transport service provider, namely to fall in the group of cars rental services and is therefore subject to Article 2(1) PBefG. The court ruled that UberBLACK violates Article 49(4) PBefG, because car rental services can only be carried out from the employer’s premises or home, but in case of UberBLACK drivers do not return to the place of business before accepting the next ride. Hence, this is a breach of law which poses an unfair competition according to the Article 3a UWG.168

Generally, it seems that other types of Uber services, especially UberX, are somehow permitted among the EU cities, because they are carried out by authorised drivers or professionals.169 However, they must comply with different rules that vary between MS or even between regions within one MS, causing regulatory uncertainty and fragmentation of the market.170

3.3 Regulatory failure and overlooked efficiencies

As presented under the preceding subsections, local and national authorities regulate Airbnb and Uber by applying existing, or in some instances amended regulations, but there are no specific laws on collaborative economy.171 Regardless, by taking a funnel-like approach, the author pointed out that within each of the two sectors, there are some common measures that the authorities apply to these business models, hence there is an EU wide pattern. More specifically, the author observed that in most cases the requirement to obtain authorisation/permits is the reason why operations of Airbnb and Uber are hindered or actually banned. Therefore, indeed, this measure/requirement will be analysed here under the theory of regulatory disconnect.

168 Gesley (n 141).
170 The Communication (n 1) 2.
171 Finck and Ranchordás (n 136) 53.
The author will focus on Germany and will use it as a case study to show that law is falling behind innovation, which deprives consumers of possible efficiencies. In order to do that, it will be presented how Airbnb and Uber are regulated in Germany, namely which provisions were used as a basis for banning these business models from operating. After that, the analysis of the provisions will be done for both companies together. Provisions relating to authorisation/permits will be analysed through the lens of regulatory disconnect. For Uber, the law that will be analysed is the Passenger Transport Act (PBeFG), because it served as a basis for banning of Uber services in Germany. And for Airbnb, it will be the Law prohibiting the misuse of dwellings – ‘Zweckentfremdungsverbot’ (ZwVbG), that the Berlin authorities adopted in 2013. Although Airbnb was not as heavily litigated as Uber, this law was argued to have intrinsically the same effect. The law was declared to be in conformity with German Federal Constitution, according to the German administrative court’s judgement in June 2016 discussed above, hence the ‘ban’ of Airbnb in Berlin was upheld and is currently in force.  

3.3.1 German regulations applied to collaborative economy

**Short-term accommodation sector.** The main legal act currently regulating this sector in Berlin, Germany is aforementioned ZwVbG. The Legal grounds for the adoption of this law are given by the Rental Law Improvement Act, which according to Article 6 allows for German regions or cities to restrict the use of dwellings to residential use only, when there is a serious shortage of housing for local population. Berlin authorities exploited this option and adopted ZwVbG in November 2013. It consists of ZwVbG Regulation (ZwVbVO) last amended in March 2016 and Implementing Regulations (AV-ZwVb) from June 2014. Before going further, it has to be pointed out that this law only applies when there is an actual shortage of housing, otherwise its provisions are void. Such an assessment is left to the courts and currently ZwVbG is in force therefore regulating Airbnb services in Berlin.

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174 Rating Legis (n 133) 51.
The general obligation under ZwVbG is prohibition on using residential properties for the purpose other than the ones they were intended (a misuse). Residential properties are meant as a home to their owners or as a long-term accommodation to regular tenants, hence these are the properties where Airbnb hosts actually live. Therefore, they are not allowed to be rented out as a short-term accommodation. Namely, a misuse consists of renting out a property for number of days/months as holiday apartment/tourist accommodation or for commercial/professional purposes, which is exactly the core of Airbnb’s business.

However, there are few exceptions concerning residential properties. They may be rented out by the owner or tenant, if he/she obtains permission from the owner, in cases of priority public or private interests or if they are able to replace the misuse of specific residential property by placing another one to the market. In order to benefit from these exceptions, hosts must get an authorisation from the competent district office, where they officially change the intended use of the property. Authorisation is granted upon filling an application form, where potential hosts must provide detailed information about themselves as well as about the property. Additionally, such application is taxed 225 euro. The authorisation deriving from that may be granted for a limited period or conditionally and it comes together with a requirement to pay compensatory payments. They serve as a compensation for the loss of housing on the market caused by the misuse and a general rule for compensatory payments is 5 euro per square meter per month.

On the other hand, parts of properties (rooms) and non-residential properties, such as holiday apartments (second homes) are not prohibited from renting under this law. However, also in order to rent out such properties, hosts must obtain permission/a permit from the authorities. Holiday apartments must be registered as such in order to be rented out. This means that potential hosts must get an official permission from the competent authorities. Moreover, renting out parts of the properties, which basically relates to rooms, is allowed only when more than 50% of the living area predominantly still serves as an accommodation of the

175 Article 2 ZwVbG; Article 2 ZwVbVO.
176 Article 2 ZwVbG.
177 Article 3(3) ZwVbG.
178 Article 3(4) ZwVbG.
179 Article 5 ZwVbG.
180 Rating Legis (n 133), 54.
181 Article 3 ZwVbG; Article 4 ZwVbVO.
In cases such as these at hand, there is no need for authorisation to use the property for purposes other than residential use, because property is not declared as such. Nevertheless, hosts need to request a ‘negative test’ to be issued by the competent district office before they are legally permitted to rent out a property. Such test assures that the use of property is, indeed, in compliance with its intended use.  

**Transportation sector.** The main legal act currently applied to this sector in Germany is PBefG. In addition to this act, the German courts have based their decisions, namely bans of UberPOP and UberBLACK services, on the UWG and regional laws governing the protection of public security and order, i.e. ASOG and HmbHSG.  

PBefG does not impose any general prohibition against transportation of passenger services, it merely regulates them, thus the law itself does not ban Uber services. PBefG applies to any transportation of persons by road, trolleybuses and motor vehicles, on scheduled or occasional basis, in exchange for remuneration. Moreover, if the services in a specific case do not meet all the criteria set by the aforementioned modes of transport, the law offers two solutions. Either provisions governing the form of transport, which is the most related to the services at hand apply or the competent authorities may grant a derogation from the provisions of this law in order to test new modes of transport. Based on the already assessed decisions of German courts, we see that Uber services were classified as transportation of persons by motor vehicles on occasional basis. The only forms of occasional transport permitted under this law are transport by taxis, rental cars and transport for the purposes of excursions or holiday trips. In line with this classification, UberPOP services are considered an occasional transport by taxis and UberBLACK services an occasional transport by rental cars. Therefore, they must comply with general provisions as well as specific provisions governing taxis and car rental services, set out by the PBefG. Provisions that the drivers of UberPOP must comply with are, i.e. requirement of a taximeter, fixed transport charges set by the regional government (basic prices, mileage and time prices), use of only permitted

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182 Articles 2(2), 5, 6 ZwVbG.  
183 Article 5 ZwVbVO.  
184 See section 3.2.2. 34-36.  
185 Articles 1(1), 2(1) PBefG.  
186 Article 2(6) PBefG.  
187 Article 2(7) PBefG.  
188 See (n 154).  
189 Article 46 PBefG.  
190 See for UberPOP (n 154); for UberBLACK (n 168).
methods of payment, a need for a waiting place for taxis in between the rides, etc.\textsuperscript{191} And for the drivers of UberBLACK, i.e. services can only be carried out from the business premises or drivers home, they must return to the starting point before picking up another customer, etc.\textsuperscript{192}

Furthermore, any person who wants to carry out services governed by this law, is required to obtain authorisation from the competent authorities,\textsuperscript{193} which are designated by the regional governments.\textsuperscript{194} In order to apply for such an approval, Uber drivers must provide a competent authority with extended information such as their personal information, place of business, which mode of occasional transport will they provide, whether they already possess a licence for this mode, type of vehicle used, the duration of providing services, etc. Moreover, if needed, the authorities can request additional information, i.e. a safety clearance.\textsuperscript{195} The approval/licence is granted only if the drivers prove that: they comply with safety standards of the place where they intend to operate; there are no reasons that will deem them unreliable; they are professionally qualified for the services they will carry on; there is a contract between the company and the person carrying out the services and that their vehicle was a subject to an extensive technical inspection.\textsuperscript{196} The authorities have a discretion over granting an approval or not, they can issue it for a specific period of time and they also can revoke it.\textsuperscript{197} For the UberPOP services, which must comply with rules regulating taxis, the approval may be refused, if the services would endanger local taxi service providers, if there is already a high density of taxi providers or if demand for such services is too low, etc.\textsuperscript{198}

With this, regulatory framework concerning collaborative economy in Germany has been established. Provisions regarding authorisation procedures and granting of approvals/licences in order to carry out Airbnb and Uber services are clear. Below, they will be analysed to see whether there is a regulatory disconnect resulting in regulatory failure and whether the business model efficiencies recognised under Section 2.3, are taken into account under applicable regulations.

\textsuperscript{191} Article 47 PBefG.
\textsuperscript{192} Article 49 PBefG.
\textsuperscript{193} Article 2 PBefG.
\textsuperscript{194} Article 11(1) PBefG.
\textsuperscript{195} Article 12 PBefG.
\textsuperscript{196} Article 13 PBefG.
\textsuperscript{197} Articles 16, 25(1) PBefG.
\textsuperscript{198} Article 13(4) PBefG.
3.3.2 Analysis of the existing German regulations

Stringent provisions introduced by the current regulations result in de facto bans of Airbnb and Uber services. Under ZwVbG, a large part of Airbnb services, which is renting out residential apartments, is prohibited. Also, UberPOP services are indirectly prohibited from operating based on the provisions under PBefG. As will be explained below, regulations that result in bans of collaborative economy business models deprive consumers of all the efficiencies pointed out under 2.3, namely (1) allocative, (2) information and (3) cost efficiencies. Those will be examined in turn in what follows. Moreover, such provisions are stifling innovation and hindering proper functioning of the internal market based on the Commission’s beliefs. The Commission’s agenda is to promote collaborative economy, because it increases competitiveness and growth. In its Communication, the Commission implicitly stated that bans or qualitative restrictions should only be used as the last measure, regardless of the objectives that the authorities want to protect. 199

Other provisions, requiring authorisation from the competent authorities or granting a licence in order to carry out services, can be described as typical ‘market entry barriers’. Such barriers make it harder for the competitors, in this case Airbnb and Uber and their consumers, to enter the market consisting of traditional businesses, such as hotels and taxi service providers. 200 Authorisation and licensing provisions impose excessive obligations to users of collaborative economy and they are usually connected to a lot of administrative hurdles and costs. 201 The obligation for hosts or drivers to apply for the authorisation for which they need to pay a fee and provide an extended information, including for drivers a certificate that they are professionals, obviously makes sharing of assets less appealing, because it takes away the simplicity and accessibility that the platforms promote. This fact deprives consumers of allocative efficiencies, because it renders the use of existing and underutilised resources extremely difficult to almost impossible. Moreover, the fact that even if they comply with all the conditions the authorisation might not be granted, because the authorities have the discretion, just adds to that. Complying with these conditions, obviously, does not allow for everyone to share their assets, even if they wanted to. Also, compensatory monthly payments imposed on hosts, if they are granted permission, deprive consumers of cost efficiencies,

199 The Communication (n 1) 4.
201 Rating Legis (n 133) 44, 60.
namely pricing efficiencies. This is due to the fact that on the one hand, prices for services offered might be set higher, because hosts incur more costs thus travellers would have to pay more. While on the other hand, prices stay the same and hosts generate less overall income than they would, if it were not for monthly payment obligation.202

Therefore, complying with such excessive conditions does not make sense for people who want to share their assets on an occasional basis, because it is too complicated and too costly. The regulations at hand prevent people from moving beyond being mere users of services provided through online platforms and to also offer their own services at the same time, which is the main idea behind collaborative economy. In addition, stringent rules are actually taking away all the competitive benefits that platforms have over traditional business models. Hence, consumers are deprived of efficiencies, especially allocative and pricing efficiencies are largely impacted. The whole idea behind Airbnb and Uber is to make sharing of assets and generating extra income easy, accessible to everyone and to offer the lowest prices, which is not possible under the imposed regulations.203

In addition, looking at the laws that regulate Airbnb and Uber and that rendered their services illegal, it can be seen that none of them were adopted in order to promote efficiencies or even have efficiencies in mind. The UWG, based on which Uber services were declared to pose unfair competition, was adopted for the purpose of protecting competitors, consumers and other market participants against unfair commercial practices and to protect the interests of the public in undistorted competition.204 Moreover, the decisions of the German courts on banning Uber were partially based on ASOG and HmbSOG, laws governing the public security and order. The sole name of these regulations shows that they are not concerned with efficiencies, but are adopted to serve public interest.205 According to the German courts’ judgements, the purpose behind provisions of the PBefG, is the protection of overriding public interests.206 Additionally, based on the German court’s decision on whether ZwVbG regulating Airbnb is constitutional, the court stated that ZwVbG serves to insure sufficient living space for the Berlin local inhabitants.207

202 Stemler (n 131) 10-12.
203 ibid 10-12, 34-35.
204 Article 1 UWG.
205 Article 1 ASOG; Article 1 HmbSOG.
206 Hamburg (n 152) para 28; Berlin (n 151) para 15; Frankfurt (n 153) paras 120, 129-130.
Following the assessment, it is clear that consumers are deprived of being able to fully benefit from the efficiencies Airbnb and Uber platforms bring. Moreover, it can be concluded that efficiencies are not taken into account under the existing regulations. This is so because the rights protected by the relevant laws in the MS are in tension with efficiency-based ideas. As is clear from the analysis of the laws and the judgements so far, the way in which public interest considerations are taken into account is going strongly against efficiencies and in some points, it is questionable whether it satisfies basic proportionality requirements of the EU law. Mostly it looks like the national authorities are using public interest considerations as a safe harbour to protect incumbents and as an excuse why their laws are falling behind current developments and stifle innovation. Such laws do have an important role in the case at hand and situations arising therefrom are suboptimal for people who want to exercise their economic rights, i.e. preventing people from renting out their own properties; making offering of services less desirable and feasible through complicated authorisation processes; etc. For these reasons, the author would like to propose a framework which could enable a more economic, competition law type of analysis that could help address the issue of regulatory disconnect.

The reason behind overlooked efficiencies and consequently for regulatory disconnect is that local authorities regulate new business models by extending existing laws, which are excessive and not fit-for purpose. Moreover, they are outdated and thus not based on the changes that technological development has brought upon businesses and consumers. 208 Existing laws were adopted in order to regulate traditional businesses and there are a lot of uncertainties as to how, and if at all, they should be applied to new business models. Technological development over the past years has been so drastic, that it has changed the whole concept of how businesses operate. Traditional businesses were based on professionals and consumers’ relationship, while innovative business models are based on peer-to-peer relationship between individuals. 209 Both Airbnb and Uber are claiming to be technology platforms acting as a mere intermediary between individuals offering services and the ones using them. They are insisting they are not service providers, such as hotels or taxis. 210 Such reality changes have rendered existing regulation outdated. For these reasons, and as

209 ibid.
210 See Airbnb (n 50); Uber (n 69).
explained above, it can be reliably claimed that there is a regulatory disconnect between the existing regulatory framework and collaborative economy business models.

Having that in mind, it must be further evaluated whether regulatory disconnect results in regulatory failure. As already mentioned, for the case at hand, regulatory failure is a situation where the EU policy and objectives support collaborative economy business models, but current regulatory frameworks do not. Promoting collaborative economy is one of the main goals of the Commission. It believes that collaborative economy business models can help create jobs, stimulate growth, increase competitiveness and contribute to the EU’s sustainability agenda. The Commission acknowledges that regulatory approaches taken by local and national authorities are mainly driven by the public interest objectives and agrees that such interests must be protected. However, measures taken must be justified and proportionate. In assessing this, the authorities must not give preference to traditional nor new business models.

In addition, in the Communication, the Commission has emphasized that: ‘Absolute bans and quantitative restrictions of an activity normally constitute a measure of last resort. They should in general only be applied if and where no less restrictive requirements to attain a legitimate public interest objective can be used.’ It concluded by stating that: ‘In view of the significant benefits that new collaborative economy business models can bring, Europe should be open to embracing these new opportunities.’ On the basis of this reasoning, applying regulatory frameworks that result in banning or depriving consumers of efficiencies obviously results in regulatory failure. It contradicts the EU objectives, which are meant to be respected by the MS. Although the rationale behind existing regulation is, indeed, public interests and protecting consumers, it has had exactly the opposite effects. While trying to protect consumers, it negatively affected consumer welfare, hindered competition and stifled innovation. Hence, one can conclude that what we observe in the cases of Airbnb and Uber described above is a regulatory failure.

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211 Butenko (n 102) 15.
212 The Communication (n 1) 2.
213 ibid.
214 ibid 2-3.
215 ibid 4.
216 ibid 16.
217 Rating Legis (n 133) 49.
Regulatory disconnect resulting in regulatory failure must be eliminated. According to scholars, one of the possibilities is to address it through vertical dimension, namely technology-neutral regulation such as IP or competition law. First reason for that lies in Brownsword and Somsen’s rule-of-thumb: ‘the more the law strives to be precise and comprehensive, the sooner it is likely to become disconnected from rapidly changing technologies that are its regulatory targets.’ Addressing collaborative economy through EU competition law could provide regulatory certainty. It is underpinned by the Commission’s opinion that ‘one-size-fits-all’ approach is not suitable, because of the variety of collaborative economy business models. Remarks of a UK House of Lords Select Committee, later supported by the Commission, are that existing competition law matrix together with non-binding guidance on how to apply EU law set out in the Communication, should suffice to tackle the issues.

However, EU competition law cannot formally be applied for the current situations of Airbnb and Uber. As Geradin argued, one of the possibilities for the companies would be to invoke Article 101(1) TFEU in connection with the duty of the MS to cooperate with the EU arising from Article 4(3) TEU. For such a possibility, there would need to be an agreement in breach of Article 101(1) TFEU that would be supported by the current laws in the MS, but in the case at hand there are no such agreements. Another possibility would be to invoke Article 102 TFEU, but then a dominant position had to be established, which largely depends on the market structure, namely the existence of competitive constraints. In order to prove dominance, one should not only look at market shares of the undertakings, but must also consider factors such as barriers to entry or expansion of existing competitors and countervailing buyer power. In the case of Uber, Ms. Vestager said on the behalf of the [References]

218 Brownsword and Somsen (n 99) 3.
219 Butenko (n 102) 75.
224 ibid para 12.
Commission that ‘a breach would require Uber holding a dominant position on the market. In addition, it should be engaging in market behaviour that could be considered an abuse of that dominance. The Commission is currently not aware of any information that would point to a possible breach of competition rules by Uber that would warrant an investigation.’

Moreover, regarding both companies, taking into account that registering and offering/searching for services through online platforms is free (you only pay when a transaction is made between service provider and user), that multi-homing is allowed and that other companies have started to enter the market (i.e. Tripping, Lyft) competing with Airbnb and Uber, dominance under 102 TFEU is unlikely to be established in dynamic markets, such as those where Airbnb and Uber operate.

Nevertheless, while it is true that new business models should not be left unregulated, there is also no reason for them to be over regulated through laws adopted for traditional business models, that deprive them of all the efficiencies brought by innovation. Seeing that existing regulations in protecting public interests are in some points going very much against efficiencies in ways that do not seem to meet basic proportionality requirements under the EU law, in the last chapter, the author would like to propose a framework that could help address the issue of regulatory disconnect.

Therefore, in the following chapter, the issues caused by the excessive regulation, namely detrimental effects on consumer welfare based on the overlooked efficiencies and hindered competition, because of the entry barriers, will be addressed through EU competition law type of analysis. The author will analyse Airbnb and Uber business model for efficiencies under Article 101(3) TFEU. The purpose of the analysis is to see, whether the efficiencies under Chapter 2.3 and Chapter 4 will be the same and therefore, it can be said that an EU competition law inspired approach can save collaborative economy business models from being banned. Resolving these issues, EU competition law inspired assessment of new

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226 See Airbnb (n 50); Uber (n 76).

227 Edelman and Geradin (n 90).


229 Geradin (n 222) 8-11.

230 Rating Legis (n 133) 49.
business models by the national authorities might appear as a counterbalance to the obviously overprotecting existing regulations.
Although EU competition law cannot formally be applied to existing collaborative economy problems, in this chapter, the author will use an assessment approach inspired by competition law to analyse Airbnb and Uber business models. More specifically, the author will use Article 101(3) TFEU type of analysis to assess whether the efficiencies, as considered under EU competition law, will be the same as the efficiencies described under the business models in section 2.3. Such an approach is supported by the fact that the existing laws do not at all consider the efficiencies when they regulate collaborative economy and due to the overlaps seen in otherwise different notions of efficiencies. The author believes that the efficiencies as observed under the business model analysis are rather similar to efficiencies as understood in competition law since. Such a conclusion is rather natural and intuitive since, indeed, the latter is inspired by business and economics literature. Therefore, Article 101(3) type of analysis could be proposed as a solution for the existing problems regarding collaborative economy in the EU.

In order to conduct an EU competition law-inspired assessment, the author will rely on Article 101(3) TFEU together with the Guidelines. They present the Commission’s view on the given article, namely how it should be interpreted, how it will apply it and how should the courts and other authorities in the MS apply it (the latter two functions are merely a suggestion, because the Guidelines are not binding). The purpose of Article 101(3) TFEU and underlying conditions will be presented and explained in the first subchapter. In the second subchapter, Airbnb and Uber business models, will be analysed for efficiencies under the framework based on this article. To be specific, framework used will consist only of the first two conditions of Article 101(3) TFEU, since they are aimed at more abstract analysis of the efficiencies that is relevant for the case at hand.

4.1 Article 101(3) TFEU

As already mentioned, the EU competition law goal is ‘to protect competition on the market as a means of enhancing consumer welfare and of ensuring an efficient allocation of

231 The Guidelines (n 97) para 4.
resources’. One way to achieve this goal is through Article 101(3) TFEU that provides an exception rule. It can be used as a defence in cases when agreements, decisions of associations of undertakings or concerted practices are prohibited because they prevent, restrict or distort competition based on Article 101(1) TFEU. Some agreements have both anti- and pro-competitive effects, namely efficiency gains. They create value through cost savings or by delivering new or improved products/services. In connection to the exception rule, the Commission has adopted the Guidelines, where it established an analytical framework on how to apply the article. The methodology behind it is based on the economic approach. It has to be noted, that only objective benefits can be considered relevant and not subjective ones resulting from the company’s exercise of market power. In cases when such ‘objective economic benefits outweigh the negative effects of the restriction of competition’, agreements should be permitted, because they are in line with EU competition law objectives, hence passing the efficiency gains on to consumers.

Article 101(3) TFEU sets out four conditions that must be met cumulatively in order for the article to apply. The first two are positive and exemplify the Commission’s way to generate efficiencies, while the other two are negative, presenting its approach to agreements and creating a possibility for exclusion. The conditions read as follows: (1) ‘the agreement must contribute to improving the production or distribution of goods or contribute to promoting technical or economic progress’; (2) ‘consumers must receive a fair share of the resulting benefits’; (3) ‘the restrictions must be indispensable to the attainment of these objectives’; (4) ‘the agreement must not afford the parties the possibility of eliminating competition in respect of substantial part of the products in question’. Following therefrom and according to the Article 3(2) of Regulation 1/2003, Article 101(3) TFEU can apply only as a counterbalance to the restrictive agreements, decision or concerted practice. Since in the case of Airbnb and Uber, there is no agreement, indeed, this is the reason why the issues cannot formally be

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232 ibid para 33.
233 ibid para 1.
234 ibid para 33.
235 ibid para 5.
236 ibid para 49.
237 ibid para 33.
238 ibid para 34.
240 ibid
241 ibid
addressed through EU competition law. However, the author believes that the rationale behind Article 101(3) TFEU is very much relevant for the situation at hand and would therefore use Article 101(3) TFEU inspired framework to analyse the business models for efficiencies.

A word ‘inspired’ is used, because the framework is based on Article 101(3) TFEU, but it is not the same. Due to the fact that the thesis deals with practices (business models), not agreements and also for the purpose of more abstract analysis, only the first two conditions that exemplify generation of efficiencies, will be applied. Nevertheless, had there been a real agreement, condition of indispensability would have been fulfilled as allocative and cost efficiencies of collaborative economy business models are very much specific to those models and cannot be achieved by other means. The same holds true for the fourth condition – no elimination of competition. The condition is fulfilled as innovative businesses are usually presumed to be drivers of innovation and competition and not vice-versa. Having said that, the thesis focuses on the first two conditions of Article 101(3) TFEU. To understand the analysis under the next subchapter, firstly, the two conditions forming the applicable framework must be explained in more detail. For the purposes of establishing the methodology under these conditions, the author will follow the explanations contained in the Guidelines.

The first condition stipulates that practices under the business models must ‘contribute to improving the production or distribution of goods or to promoting technical or economic progress.’ Although the reference is made only to goods, the same applies to the services. The purpose is to define what type of efficiency gains are relevant for the analysis and what are their economic implications. As is clear from the Guidelines, the Commission adopted a narrow approach, thus the benefits considered should only be economic ones. Jurisprudence of the Court of Justice (hereinafter: the ECJ) elaborated on that by stating that only objective benefits are the efficiencies relevant for the analysis and that they must be beneficial to the EU as a whole, not only to the parties involved. Moreover, claiming such efficiency gains, they must be properly supported with the relevant data. That is because it must be clearly visible and verifiable: that the efficiencies are objective in nature; that there is

243 Article 101(3) TFEU.
244 The Guidelines (n 97) para 50.
245 Ibid paras 5, 30, 33.
246 Ibid para 49.
247 Case C-382/12P MasterCard Inc. and Others v Commission EU:C:2014:2201.
a direct causal link between business models and the efficiencies; what is their likelihood and magnitude and how and when they will be realized.248

Although Article 101(3) TFEU considers efficiencies as a broad category, for the purposes of the Guidelines and the explanation contained therein, the Commission divided them in two categories, namely cost and qualitative efficiencies and it provided a non-exhaustive list of examples for both.249 Cost efficiencies are associated with reduced costs of production for the companies that result in lower prices for consumers. They are likely to arise from economies of scale or scope, from new production technologies and methods, synergies from integration of existing assets, from better capacity utilisation, etc.250 On the other hand, we talk about qualitative efficiencies when companies create new or improved products/services or they provide a greater variety of products/services, hence better satisfy consumers’ needs. These efficiencies may arise from technical and technological advances, combination of complementary assets, due to specialised distribution, etc. 251

The second condition of Article 101(3) requires that the fair share of the abovementioned efficiencies is passed on to the consumers. Here, the notion ‘consumers’ must be understood as ‘all direct or indirect users of the products…including producers that use the products as an input, wholesalers, retailers and final consumers, i.e. natural persons who are acting for purposes which can be regarded as outside their trade or profession’.252 Moreover, ‘the concept of “fair share” implies that the pass-on of benefits must at least compensate consumers for any actual or likely negative impact caused to them’,253 hence the overall effect of the business models should be at least neutral.254 Additionally, the whole society can benefit in cases where ‘the efficiencies lead either to fewer resources being used to produce the output consumed or to the production of more valuable products and thus to a more efficient allocation of resources’.255 For the second criterion to be met not all of the efficiency gains, but indeed, a fair share of the overall benefits must be passed on to the consumers
within the relevant market in a certain time frame.\textsuperscript{256} This condition incorporates a ‘sliding scale approach’ meaning that, if negative effects are limited while the efficiency gains are of high magnitude, this implies that the consumers will receive a fair share of such efficiencies and vice versa.\textsuperscript{257} In cases where both are significant, an extensive analysis will have to be conducted. Nevertheless, it has to be kept in mind that maintaining competition is of high importance, because it is a driver behind efficiency and innovation. The more the competition on the market is hindered, the worse the consequences for consumers.\textsuperscript{258}

According to the Guidelines, when assessing if the consumers get their fair share of the cost efficiencies, one must consider: ‘(a) characteristics and structure of the market, (b) the nature and magnitude of the efficiency gains, (c) the elasticity of demand and (d) the magnitude of the restriction of competition’.\textsuperscript{259} On the other hand, for the qualitative efficiencies it is hard to determine the exact value of such dynamic efficiencies, but the underlying objective – the overall benefit for consumers – stays the same.\textsuperscript{260} Especially, new or improved products contribute a lot to the overall consumer welfare as one of the main objectives of EU competition law. Thus, whenever improvements are greater than possible negative effects, consumers will benefit.\textsuperscript{261}

4.2 Analysis of collaborative economy business models

For the analysis under this subchapter the author will use the information on Airbnb and Uber business models as presented in sections 2.2.1 and 2.2.2. This information will be analysed through Article 101(3) TFEU inspired framework, that was explained in the preceding subchapter, in order to analyse the business models for efficiencies, as understood under EU competition law. The analysis will be done for both companies together, since the author considers such an approach more appropriate due to the fact that there are considerable similarities between the companies. The very idea behind Airbnb and Uber is the same - they consider themselves technological companies providing connecting services through their platforms. They provide a platform where different groups of consumers can connect and share their assets. Hence, the main sources of efficiencies for both companies are their online

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\item \textsuperscript{256} ibid paras 86- 87.
\item \textsuperscript{257} ibid para 90.
\item \textsuperscript{258} ibid para 92.
\item \textsuperscript{259} ibid para 96.
\item \textsuperscript{260} ibid para 103.
\item \textsuperscript{261} ibid para 104.
\end{itemize}
platform and the idea of using private capital owned by consumers to provide services, therefore promoting better allocation of resources.262

The following assessment is meant to show whether collaborative economy business models are ‘improving the production or distribution of goods or promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit’.263 Based on these two conditions, namely existence of objective economic benefits and fair share for consumers that form a framework, it will be substantiated whether there are, indeed, efficiency gains. The author will follow the Guidelines and will distinguish between cost and qualitative efficiencies, although it will be seen that in some cases it is hard to make a clear distinction, because one competitive advantage of business models might give rise to various types of efficiencies.264 Therefore, the author will approach the assessment by focusing on two categories of efficiencies separately. Under each of the categories, the author will take key advantages of business models and will explain in what manner they create efficiencies. To substantiate the efficiency gains, both conditions of Article 101(3) TFEU relevant to this study must be considered together and will as such be presented under the two categories, hence there will be no clear distinction of these conditions.

Before going further, it has to be noted that Airbnb and Uber’s operations affect consumers on two different markets, namely people who offer their services (hosts, drivers) and the ones who use them (travellers, riders).265 Since this is the case, objective economic benefits passed-on to either of groups can be considered as efficiencies under Article 101(3) TFEU type of analysis.266

Furthermore, as already mentioned, basically all of the efficiency gains stem from the main idea behind collaborative economy and from the fact that Airbnb and Uber use new technologies, namely online platforms in order to operate.267

4.2.1 Cost efficiencies

262 See Edelman and Geradin (n 90); Supporting Analysis (n 93).
263 Article 101(3) TFEU.
264 The Guidelines (n 97) para 59.
265 See sections 2.2.1, 13; 2.2.2, 17.
266 MasterCard (n 247) para 237.
267 Edelman and Geradin (n 90).
The first and the most important source of cost efficiencies is better utilisation of assets. It is enabled through the use of online platform, but also connected to the main idea behind collaborative economy. On the one hand, the companies are offering connecting services by creating an online platform where users can connect and on the other hand, they are enabling users to offer their own assets/services to generate an income. Airbnb and Uber themselves do not own the assets necessary to provide accommodation or transport services. Moreover, they both strictly claim that they are not accommodation/transport service providers, but technological companies acting as mere intermediaries. Hence, their sole role is to provide, maintain and develop a platform and the technology behind it and to connect the users.268

On the basis of this, the companies are clearly using new technological developments and methods to satisfy consumers in accommodation and transportation sector. Furthermore, they are relying on synergies created by combining already existing assets, which are companies’ platforms and users’ properties or vehicles. Such organisation benefits the companies, because they incur less costs by not having to buy properties, vehicles, obtain necessary licences, etc. and consequently, creates cost efficiencies for consumers. According to the ING’s study from July 2015,269 the main drivers for people participating in collaborative economy, are the opportunity to save money and/or to easily generate an extra income (see Appendix 3). Specifically, for the companies at hand, travellers and riders benefit from lower prices, while hosts and drivers are the ones that can actually earn additional money. They benefit from the fact that now they are enabled to exploit the assets they already own to generate an extra income, which they could not have done otherwise. Indeed, data from the PwC Impulse Paper (hereinafter: the PwC Impulse Paper),270 which was made on the request of the Commission (DG GROW) in order ‘to assess the size and presence of the collaborative economy in the EU’,271 showed that on average 85% of the whole value of transaction

268 See (n 226).
270 According to the findings, five most important sectors where collaborative economy is present are: peer-to-peer accommodation sector (i.e. Airbnb), which has also sector with the largest transaction value; peer-to-peer transportation sector (i.e. Uber), which is the largest by revenue; on-demand household services and professional services and collaborative finance sector. See Robert Vaughan and Raphael Daverio, ‘Assessing the Size and Presence of the Collaborative Economy in Europe’ (PwC UK, 19 February 2016) <https://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjjpZ3ohYfUAhVQElAKHXOVDs4QFggMAA&url=http%3A%2F%2Fec.europa.eu%2FDocsRoom%2Fdocuments%2F16952%2FAttachments%2F1%2FTranslations%2Fen%2Frenditions%2Fnative&usg=AFQjCNRhX3OpYTBZOzpHuexgb4DcFm6U2A&sig2=O2Xqgxxr38UG2uW3kGEYA> accessed 21 May 2017.
271 ibid 7.
facilitated through an online platform is received by users who are offering their services through such platform (see Appendix 2). Taking into account the data provided in the same analysis, the total value of transactions facilitated through platforms in P2P accommodation and transport sector in 2015 was approximately 20 million euro (see Appendix 2). If we then consider that on average 85% of the value is passed on to the hosts/drivers, this amounts to approximately 17 million euro of extra income that users in these two sectors were able to generate through all the transactions. Even though, it has to be stressed out that this is the data for the whole accommodation and transport sector, meaning that Airbnb and Uber alone did not create such value, they are still the biggest representatives of these two sectors. Additionally, findings from the ING’s study regarding Europe show that irrespective of sectors, most people who shared their assets through collaborative economy platforms earned up to 1000 euro, average earnings per person being around 300 euro.\textsuperscript{272} This data is important, because it shows the great role that collaborative economy business models play for the consumers’ economic benefits.

Taking a closer look at the ‘pass-on’ condition, it has to be noted that for Airbnb and Uber there is a slight difference. While in the case of Uber, the company is the one setting the prices for a ride thus, lower prices for consumers come as a logical consequence of reduced costs incurred by the company. On the other hand, in the case of Airbnb, hosts are the ones setting the prices and not the company itself, although they do set the maximum limit.\textsuperscript{273} This makes connection between reduced company’s costs and prices for consumers less clear. However, the fact that hosts are exploiting the assets they already own, they do not incur costs like hostels or hotels so the final prices are nevertheless lower. On top of that, if they were to pose too high prices, travellers would simply book accommodation from someone else. All in all, offering more listings on the rental market creates more competition, hence lower prices. Thus, in the end both groups of consumers of Airbnb and Uber are better off.

Additionally, due to the fact that what is observed under this section is better allocation of resources, according to paragraph 85 of the Guidelines, not only consumers, but the society as a whole can benefit from these business models. Supported by the facts from the aforementioned PwC Impulse Paper, it can definitely be concluded that collaborative economy business models create efficiencies for the overall economy. The analysis showed that in 2015, only in Europe they have generated about 4 million euro in revenues.

\textsuperscript{272} ibid 9.
\textsuperscript{273} See Airbnb (n 50); Uber (n 82).
Additionally, the estimations are that until 2025 global revenues created by the collaborative economy could reach up to $335 billion.274

Secondly, Airbnb and Uber businesses use economies of scale to create cost efficiencies, which is once again connected to the use of online platform and the idea behind Airbnb and Uber operations. The companies want to make possible for anyone, anywhere to be able to share their assets and an online platform enables them to do so. Allowing anyone to share their assets is supported by the fact that the companies pose less requirements to their users (hosts, travellers).275 For example, in order to provide UberPOP services, which were the most scrutinised among the EU,276 almost everyone can drive. People are subject to the background check for any criminal history, but they do not have to be professional drivers or obtain any licences.277 The same is for Airbnb, anyone who has an extra space can list it on the platform.278 Although, it has to be acknowledged that less requirements do pose risks from a consumer protection perspective and a lot could be said in this perspective, it is not the purpose of this thesis. On the contrary, the author deals with the idea how overall economic efficiencies from these new business models can be augmented. Thus, the first argument supporting the idea is that less requirements widens a pool of potential drivers/hosts for the companies and thus creates a potential for more transactions. And the second one just adds to that, arguing that using online platforms is enabling these companies to operate and attract people worldwide. For Airbnb and Uber, this is important because they want to exploit economies of scale, which is exactly the situation at hand. Operating worldwide and posing less restrictions they are attracting more users who offer their services through platforms thus, the more people are able to use these services and ultimately, more transactions are facilitated. Such argumentation is supported by the data arising from the PwC Impulse Paper showing that in 2015, the value of transactions facilitated through collaborative economy platforms in P2P accommodation sector was approximately 15 million euro and in P2P transportation sector approximately 5 million euro. Moreover, the facts show that transaction values have doubled compared to year 2014 (see Appendix 2).279

274 PwC UK Impulse Paper (n 270) 4.
275 See Airbnb (n 46); Uber (n 74).
276 See Johnson (n 147).
277 See Uber (n 74).
278 See Airbnb (n 46).
279 PwC UK Impulse Paper (n 270) 7.
Being able to facilitate more transactions (output) based on the same platform (investment) is a typical example of economies of scale.\textsuperscript{280} Although the companies do incur some additional costs not related to the platform, their investments are mainly comprised of the costs for the platform and marketing. Since the platform is the same and because their marketing strategy is based on building a community and word of mouth, meaning that most of the marketing is done by the users themselves,\textsuperscript{281} this means that, indeed, they can facilitate more transactions based on the same investment. For Airbnb and Uber increased number of investments therefore results in lower cost per transaction and for the consumers, economies of scale result in lower prices.

Lastly, another way in which Airbnb and Uber are creating cost efficiencies is through economies of scope. Both companies are spreading their operations to different sectors, therefore offering different services based on the same input – the platform.

Airbnb has launched its new Trips platform in 2016. Besides homes, they now offer ‘experiences’ and ‘places’, all through the same platform.\textsuperscript{282} Similar practices can be observed with Uber. Through their platform, they offer various Uber services based on different vehicle models and consumers’ needs, such as UberPOP, UberX, UberBLACK, UberPOOL, etc.\textsuperscript{283} This is a typical example of economies of scope, where company offers different services based on the same input and therefore benefit from the production or distribution cost savings.\textsuperscript{284} Both Uber and Airbnb invest in the platform through which they then make all of these different services available. Hence, various services create more potential for increasing number of transactions, which once again result in lower cost per unit produced.\textsuperscript{285} On the one hand, travellers and riders benefit from such economies of scope due to lower prices. On the other hand, this created more possibilities for the consumers that would like to offer their services through platforms to generate an income, i.e. people who do not own a property can now offer experiences or someone who does not own a luxury vehicle can offer rides through UberPOP or UberX.

\textsuperscript{280} The Guidelines (n 97) para 66.
\textsuperscript{281} See for Airbnb ‘Business Model Canvas for Airbnb’ (n 65); for Uber Oakley (n 88).
\textsuperscript{282} See Airbnb (n 45).
\textsuperscript{283} See Uber (n 76).
\textsuperscript{284} The Guidelines (n 97) para 67.
\textsuperscript{285} ibid.
Additionally, Uber has launched UberEATS and UberRUSH services and with that expanded their operations to the logistics sector. However, platforms for these two services are different and only drivers are the common resource that can be used within both sectors. Against such background this might not be a proper example of economies of scope, but nevertheless benefits for consumers, namely drivers, are that they get possibilities to offer their services through more sectors and Uber benefits from being able to use the same people to provide different services.

4.2.2 Qualitative efficiencies

Qualitative efficiencies stemming from Airbnb and Uber business models are definitely based on drastic technological development and innovation. The main reason why these companies create services that are of better quality and better suited for consumers’ needs is their online platform.

Firstly, the platform creates a one-stop shop, meaning that everything is facilitated through this platform, which makes it a lot easier for consumers to access the services, hence the services are more user friendly. It also makes transactions much simpler and faster. Consumers can search for the right accommodation or a ride and connect to the person offering the service through the platform. Moreover, the same platform allows consumers to directly communicate between each other to determine the specifics of their bookings, i.e. some special needs or wishes. Also, payments for the services are made automatically through the platform. Airbnb and Uber both have no cash payments policies, so the companies deduct the amount directly from the consumer’s credit card. This prevents the risks of the drivers or hosts not to get paid and saves the trouble of dealing with cash and having enough change at all times to be able to make returns. Lastly, in case there is something wrong, companies offer a 24/7 customer support, which can be accessed through the platform.

Secondly, the platform reduces information asymmetries and creates trust. Airbnb and Uber make use of rating systems, namely star review and written review, in order to provide quality assurance of their services. After using the services consumers are always asked to rate the

286 See 'UberEats' (n 70); 'UberRush' (n 71).
287 See Edelman and Geradin (n 90).
288 ibid.
services. Such reviews are important source information for other consumers as well as for the companies. By being able to read the reviews, consumers are better suited to choose the best fit for them. Also, it gives them a sense of trust and assurance in the quality of services, which they do not necessarily get i.e. for taxi service providers or hotels. Additionally, review system enables the companies to keep control over the quality of their services and to interfere, if needed, by banning problematic users.289

Related to creating trust and control over the quality of services, it has to be mentioned that Uber uses one other feature that creates the same qualitative efficiencies, namely GPS tracking system. This enables Uber to keep control over the service providers’ vehicles when they are offering services. Furthermore, this feature creates a lot of benefits for consumers. Due to the GPS, consumers can at all times see where their driver is located, which prevents them from waiting for a ride on the street not knowing when the driver will pick them up. After taking a ride, consumers can check whether the route that the driver is taking is the most optimal one or the one they agreed for. Also, they can share their location with friends to let them know where they are in case anything would happen.290

In addition, Uber creates trust and enhances quality of services, especially regarding safety by giving riders information on their service providers. More specifically, riders can see the pictures of drivers providing the services, what kind of vehicle they use, what is the licence plate number, etc. This creates a safety mechanism so that consumers can verify, if the driver is the right person.291

Moreover, Airbnb and Uber provide services that are better suited to consumers’ needs, because they are creating a greater variety of different services. Airbnb, by using private capital to connect hosts with travellers, is able to offer basically any kind of accommodation anywhere. On their platform, there are listings from boats to villas or castles and the listings are spread all over the cities and suburbs, in contrast to hotels that are usually gathered in the city centres. Such variety of choices provides for a better consumer experience, because consumers are not limited in their choices.292 The same is with Uber. They are offering different services from UberPOOL, to UberPOP or UberLUX, etc. It all depends on

289 Uber <https://help.uber.com/h/7b64dda6-78f5-4575-b7da-3c9e40d2c816> accessed 21 May 2017.
290 See Uber (n 79).
291 ibid.
292 See Airbnb (n 49).
consumers’ desires. If they want to save money, they will use the first option, but in case they want to ride in style or they are attending some special occasion, they will use UberLUX. All in all, wide variety of services create more personalised experiences and better satisfy consumers’ needs.\(^{293}\)

The above mentioned applies to both companies, while Uber creates qualitative efficiencies for consumers through two other technological advances, namely pricing and routing algorithms. The latter, calculates the most optimal way to get from point A to B. It therefore reduces consumers’ waiting time and it provides for the most optimal route to get consumers to the final location. Hence, the main efficiency gain is saved time.\(^{294}\)

On the other hand, pricing algorithm determines prices for the use of services based on the real-time information about the market in any given time of the day. When the demand is higher than supply, prices will be higher and vice versa.\(^{295}\) In order for the argument to be complete, it has to be noted, there has been claims that this algorithm is anti-competitive because it constitutes price fixing. More specifically, it could be considered an example of ‘hub-and-spoke’ cartel ‘whereby one pricing algorithm may be used to determine prices charged by numerous users’.\(^{296}\) For such claims to be valid the ‘conception of competition requires two or more entities capable of acting independently on the market’.\(^{297}\) This is not the case, since even though drivers are not employees of Uber, they all form one single economic entity on the basis that ‘Uber exercises a decisive influence over the drivers, making them adopt “in all material respects” the instructions given to them by Uber’,\(^{298}\) i.e. determine service names, standards, codes of conduct, drivers’ requirements, use of pricing algorithm, etc.\(^{299}\) Furthermore, even if drivers were to be considered as independent undertakings, cartel claims would not stand, because ‘agreement cannot be based on what is only the expression of a unilateral policy of one of the contracting parties, which can be put into effect without the

\(^{293}\) See Uber (n 76).
\(^{294}\) See Oakley (n 83); Edelman and Geradin (n 94).
\(^{295}\) See Edelman and Geradin (n 92).
\(^{299}\) Cifuentes (n 228).
assistance of others’. Uber prices are set based on the technology – pricing algorithm thus, unilateral conduct. Moreover, as the CEO and co-founder of Uber, Travis Kalanick said ‘we are not setting the price. The market is setting the price. We have algorithms to determine what that market is’. Lastly, even if previous arguments would not be successful, and pricing algorithm would be constituted as an agreement between Uber and drivers that are independent undertakings, it could be saved through an exemption of Article 101(3) TFEU. That is because, it creates a fair share of qualitative efficiencies for consumers. It provides them with more information and gives them greater flexibility in deciding whether they want to use the services. Drivers are already free to decide when they want to work, since they are users of the platform and not employees. However, based on the surge pricing mechanism now they also know when they will get paid more. On the other hand, the same is beneficial to the riders, because now they have approximate information about the prices and they can decide to use the services at any other point in time. On top of that, not only does not hinder or eliminate competition, Uber’s entry into the market increased competition and stimulated creation of new businesses to come and compete on the market i.e. Lyft, Bla Bla Car, etc. which consequently stimulates innovation.

On the basis of Article 101(3) type of analysis of Airbnb and Uber business models and taking into account data from the PwC Impulse Paper and the ING study, the author has proven that these new business models, indeed, create cost and qualitative efficiencies that are passed on to the consumers. Thus, should these companies be subject to EU competition law rules only, they would be rendered legitimate. Moreover, following the numbers from the PwC Impulse Paper, it is obvious that collaborative economy is largely present in the EU as well as globally and that it contributes in a great way to the overall economy. It creates economic benefits for the consumers and the EU as a whole.

300 ibid.
302 Cifuentes (n 228).
303 See Oakley (n 83); Edelman and Geradin (n 90).
304 Cifuentes (n 228).
5. CONCLUSION

Seeing the wide spread of collaborative economy through the recent years and the estimations for the future, it is obvious that it is not just a passing fad, but quite to the contrary, collaborative economy is here to stay and it might even take over the leading role. Online platforms of collaborative economy exploit technological developments and innovation to create efficiencies which are not only beneficial to consumers, but might positively affect the overall economy. The author believes that new business models should not be fought against, as seems to be the current trend among the national authorities within the EU, but instead, they need to be embraced. On the basis of this, the main research question of the thesis was whether current legal frameworks prevent innovation by banning new business models like Airbnb and Uber without taking into account the efficiencies they might bring to the overall economy. The question was assessed from the theory of regulatory disconnect, as a selected theoretical framework, to determine whether the law really falls behind innovation.

It has been shown that the ways in which new business models like Airbnb and Uber operate, indeed, create wide variety of efficiencies. The reason behind the efficiencies is due to the technology and innovation that is exploited by the companies. Online platforms are therefore the main source of efficiencies. They create allocative and price efficiencies, which enables more people to participate in collaborative economy, thus creating better utilisation of assets, which allows people to save money or generate an extra income. Moreover, it reduces transaction costs because the platform acts as a one-stop shop, facilitating all the activities related to transactions, which saves time and makes the use of the services simpler. Additionally, the fact that all the information regarding the services is available on the platform reduces information asymmetries and consequently creates trust in the quality provided. Pointing out all of these efficiencies, it had to be assessed whether they are actually taken into account by the national authorities when regulating new business models.

The assessment was done through the theory of regulatory disconnect, which takes the view that if the law cannot evolve as fast as its targeted subject, it becomes disconnected – regulatory disconnect. It also acknowledges that the technological field is a dynamic one and especially in the last years, technology is growing exponentially, while the law is more traditional, it exists to create certainty and trust, not to constantly change. Therefore, it is normal that regulation becomes disconnected. However, if it cannot reconnect again, this may
result in regulatory failure, which is problematic since it undermines the whole purpose of regulation.

In order to check for regulatory disconnect, it had to be presented how the authorities in the MS of the EU regulate collaborative economy business models. It was established that there are no common laws specifically regulating collaborative economy on the EU level, nor on the level of the MS. It was observed that these businesses are usually regulated on the sectoral, local or regional level and vary among the MS. However, taking a closer look at the specific measures taken to regulate collaborative economy, it appeared to be that the MS are rather uniform in applying laws that are targeted at imposing some kind of a requirement for authorisation/permission. Thus, they are taking a defensive stance, using protectionist measures to favour traditional businesses.

This was shown through regulations for Airbnb and through the courts’ decisions for Uber. In both cases, the national authorities applied stringent measures that resulted in direct bans or at least depriving business of the efficiencies. The fact that none of the applied regulations were adopted having in mind efficiencies, but rather public interests’ considerations, only supports the conclusion that current regulatory frameworks do not take into account efficiencies. When these measures were analysed through the theory of disconnect, it was obvious that the law falls behind innovation, because new businesses need to comply with stringent rules that were adopted for traditional businesses, not taking into account technologies that are at disposal nowadays. Moreover, considering that the EU’s objective is to promote collaborative economy while the MS are banning it and with that clearly go against the EU principles, it was concluded that there is, indeed, a regulatory failure which must be resolved.

While it is true that new business models should not be left unregulated, there is also no reason for them to be over regulated through laws that are outdated and not fit-for purpose. Seeing that existing regulations in protecting public interests are in some points going very much against efficiencies in ways that do not seem to meet basic proportionality requirements under the EU law, the author wanted to propose a solution that could address these issues.

The author’s first attempt was to solve it by applying EU competition law rules, since the opinion of the Commission is that the existing competition law framework and non-binding guidance on the application of such laws, should be enough to tackle the issues at hand. More
specifically, the author considered a solution through Article 101(3) TFEU, since it is aimed at efficiencies. Regardless of the different regulatory embedding the efficiencies under EU competition law rules and the ones described under business models, the author observed that they largely overlap, which would underpin the analysis under Article 101(3) TFEU. However, seeing that in cases of Airbnb and Uber there is no agreement and the specific article governs only agreements, EU competition law rules cannot formally be applied. Nevertheless, because the author still believes that the rationale behind Article 101(3) TFEU is appropriate to address the current situation, a solution inspired by EU competition law, namely Article 101(3) type of analysis is proposed.

The author established that for such analysis only the first two conditions of Article 101(3) TFEU would be applied, because these are the ones exemplifying generation of efficiencies, cost and qualitative, as understood under EU competition law. These conditions stipulate that the efficiencies are created: if business models improve the production or distribution of products/services; if they promote technical or economic progress and if by doing so they are allowing consumers to receive fair share of the resulting benefits. Airbnb and Uber business models were then assessed by applying this framework. The purpose of the analysis was to establish whether they do give rise to the efficiencies, as understood under EU competition law and thus, the proposed solution can actually save collaborative economy business models. The analysis showed that Airbnb and Uber enable consumers to receive a fair share of cost and qualitative efficiencies. The main reasons for efficiency gains are concluded to be the online platform and the very idea behind collaborative economy, therefore the efficiencies could not be achieved by using traditional business models.

As aforementioned, situations regarding Airbnb and Uber are not about anticompetitive agreements, but about the way these businesses operate, thus EU competition law rules cannot formally apply. Based on the results from the final analysis, the author suggests Article 101(3) TFEU type of analysis as a solution to tackle the issues regarding collaborative business models. Since the Commission does not have the powers to act, the author would propose that the action in the form of proposed solution should be taken by the national authorities when regulating collaborative economy business models. As it has been clearly shown in the thesis, public interest considerations are already taken into account under existing laws. Against this background, the author believes that, in addition, Article 101(3) type of analysis that considers objective economic interests, needs to be performed when deciding if new business
models should be permitted or not. Such a toolbox would provide the national authorities with information necessary to assess the situation from all the different perspectives in order to make proper decisions. More specifically, such an approach would enable balancing of interests on the one hand, public interests protected by existing laws and on the other hand, objective economic interests arising from Article 101(3) type of analysis. The author believes that proposed approach would be the most suitable way to achieve the best results for consumers and the society as a whole.
## Appendix 1

### Airbnb business model canvas

<table>
<thead>
<tr>
<th>Key partnerships:</th>
<th>Key activities:</th>
<th>Value propositions:</th>
<th>Customer relationships:</th>
<th>Customer segments:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Platform maintenance and development</td>
<td>- Simple and flexible platform</td>
<td>- Automated services platform</td>
<td>- Hosts</td>
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<td></td>
<td>- Building community</td>
<td>- Host can earn money and connect to communities</td>
<td>- Co-creation by review system and storytelling</td>
<td>- Private travellers</td>
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<tr>
<td></td>
<td>- Product development</td>
<td>- A unique experience</td>
<td>- Host guarantee</td>
<td>- Business travellers</td>
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<td></td>
<td>- Advertising</td>
<td>affordable prices and variety of choices for travellers</td>
<td>- Host insurance</td>
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<td>- 24/7 customer support</td>
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<td>Key resources:</td>
<td>- Platform</td>
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<td>Channels:</td>
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<td></td>
<td>- Brand</td>
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<td>- Airbnb platform</td>
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<td>- Financial investments</td>
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<td>- Application</td>
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<td>- Talented people</td>
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<td>- Content marketing</td>
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<td>- Review system</td>
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<tr>
<td>Cost structure:</td>
<td>- Platform maintenance and development</td>
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<td>- Marketing</td>
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<td>- Payments to employees</td>
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<td></td>
<td>- Legal and insurance costs</td>
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<tr>
<td>Revenue streams:</td>
<td>- 3% service fees charged to hosts</td>
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<td></td>
<td>- 6-12% service fee charged to private travellers</td>
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<td></td>
<td>- 2.5% service fees charged to business travellers</td>
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</tbody>
</table>

### Uber business model canvas

<table>
<thead>
<tr>
<th>Key partnerships:</th>
<th>Key activities:</th>
<th>Value proposition:</th>
<th>Customer relationships:</th>
<th>Customer segments:</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>- maintenance and development of technology</td>
<td>- simplicity of platform</td>
<td>- platform automated relationship</td>
<td>- drivers</td>
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<tr>
<td></td>
<td>- marketing</td>
<td>- automatized payments</td>
<td>- 24/7 customer services</td>
<td>- riders</td>
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<td>- attracting drivers</td>
<td>- connecting supply and demand</td>
<td>- review system</td>
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<td>- lower prices</td>
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<td>- wider choices for riders</td>
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<td>- flexibility for drivers</td>
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<td>- extra income</td>
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<tr>
<td>Key resources:</td>
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<td></td>
<td>Channels:</td>
<td></td>
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<tr>
<td></td>
<td>- drivers</td>
<td></td>
<td>- platform</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- talented people</td>
<td></td>
<td>- mobile apps</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- social media marketing</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>- word of mouth</td>
<td></td>
</tr>
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<td>Cost structure:</td>
<td>- technological maintenance and development</td>
<td></td>
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<tr>
<td></td>
<td>- marketing</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>- drivers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- employees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue streams:</td>
<td>- fare payments</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>- surge pricing</td>
<td></td>
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</tr>
</tbody>
</table>
Appendix 2

Revenues and transaction values facilitated by collaborative economy platforms in Europe (€m, 2015)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Revenue 2015 (€m)</th>
<th>Value 2015 (€m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2P Accommodation</td>
<td>€1,150</td>
<td>€15,100</td>
</tr>
<tr>
<td>P2P Transportation</td>
<td>€1,650</td>
<td>€5,100</td>
</tr>
<tr>
<td>On-demand household services</td>
<td>€450</td>
<td>€1,950</td>
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<tr>
<td>On-demand professional services</td>
<td>€100</td>
<td>€750</td>
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<tr>
<td>Collaborative Finance</td>
<td>€250</td>
<td>€5,200</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>€3,600</strong></td>
<td><strong>€28,100</strong></td>
</tr>
</tbody>
</table>

Source: PwC analysis. Note: Figures may not sum due to rounding.

Revenues and transaction values facilitated by collaborative economy platforms in Europe (% of total, 2015)

Revenues and transaction values facilitated by collaborative economy platforms in Europe (Growth, 2013-2015)

Source: PwC analysis
Appendix 3

Factors influencing participation in the collaborative economy in Europe in 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>It saves money</th>
<th>An easy way to make extra money</th>
<th>It is good for the environment</th>
<th>It helps build communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Consumer</td>
<td>58%</td>
<td>53%</td>
<td>32%</td>
<td>47%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>48%</td>
<td>43%</td>
<td>43%</td>
<td>35%</td>
</tr>
<tr>
<td>Belgium</td>
<td>48%</td>
<td>49%</td>
<td>39%</td>
<td>36%</td>
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<tr>
<td>Romania</td>
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<td>44%</td>
<td>43%</td>
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<td>Czech Republic</td>
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<td>Netherlands</td>
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<td>Luxembourg</td>
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<td>55%</td>
<td>39%</td>
<td>43%</td>
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<tr>
<td>France</td>
<td>57%</td>
<td>49%</td>
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<td>46%</td>
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<td>Germany</td>
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<tr>
<td>Austria</td>
<td>61%</td>
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<td>48%</td>
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<tr>
<td>Poland</td>
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<td>53%</td>
<td>59%</td>
</tr>
<tr>
<td>Spain</td>
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<td>54%</td>
<td>57%</td>
<td>48%</td>
</tr>
<tr>
<td>Italy</td>
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<td>62%</td>
<td>57%</td>
<td>58%</td>
</tr>
</tbody>
</table>

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